

PROJECT ID: PMN06011997

SAMPLE ID: NO SAMPLE ID

descriptor: PESTICIDE  
MONITORING NETWORK

PN154

# IDE M

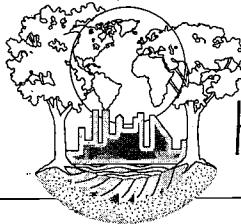
DK 12471 - DK 12478, DK 12373, DK 12479 - DK 12481 & DK 12329



Environmental  
Health Laboratories

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110 South Hill Street  
South Bend, Indiana 46617  
(219)233-4777  
(800)332-4345  
(219)233-8207 FAX



# Environmental Health Laboratories

110 S. Hill Street  
-South Bend, IN 46617-2702  
(219) 233-4777  
(219) 233-3272  
FAX (219) 233-8207

## **LABORATORY REPORT**

**Client:** IDEM  
**Attn:** Mitt Denney  
Groundwater Section  
100 North Senate Avenue  
P. O. Box 6015  
Indianapolis, IN 46206-6015

Report #: 386258-342

### Priority: Standard Written

Status: Final

Project : DK 12471 - DK 12478, DK 12373, DK 12479 - DK 12481 & DK 12329

Samples Submitted: Thirteen groundwater samples

Copies to: None

Collected: 01/23 to 01/31/99 By: Client

Received: 01/26 to 02/02/99

## REPORT SUMMARY

Thirteen groundwater samples were submitted for analysis of Task 4A, 2,4-D and Carbofuran (Enzyme Immunoassay), Pesticides (Method 525.2), Chlorinated acids (Method 515.1) and Carbamates (Method 531.1).

The following is a summary of the results by sample.

Note: Sample containers were provided by the client.

## **2,4-D Enzyme Immunoassay (Case Narrative)**

Analytical results were designated as reportable based on the associated quality control samples.

## 2,4-D Enzyme Immunoassay (Results Summary)

- DK 12471      2,4-D was not detected in the sample submitted for analysis.

DK 12472      2,4-D was not detected in the sample submitted for analysis.

DK 12473      2,4-D was not detected in the sample submitted for analysis.

DK 12474      2,4-D was not detected in the sample submitted for analysis.

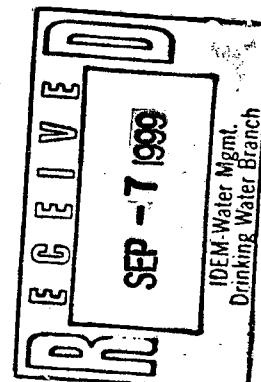
DK 12475      2,4-D was not detected in the sample submitted for analysis.

DK 12476      2,4-D was not detected in the sample submitted for analysis.

DK 12477      2,4-D was not detected in the sample submitted for analysis.

DK 12478      2,4-D was not detected in the sample submitted for analysis.

DK 12373      2,4-D was not detected in the sample submitted for analysis.



**2,4-D Enzyme Immunoassay (Results Summary) - Cont'd**

DK 12479        2,4-D was not detected in the sample submitted for analysis.  
DK 12480        2,4-D was not detected in the sample submitted for analysis.  
DK 12481        2,4-D was not detected in the sample submitted for analysis.  
DK 12329        2,4-D was not detected in the sample submitted for analysis.

**Carbofuran Enzyme Immunoassay (Case Narrative)**

Analytical results were designated as reportable based on the associated quality control samples.

**Carbofuran Enzyme Immunoassay (Results Summary)**

DK 12471        Carbofuran was not detected in the sample submitted for analysis.  
DK 12472        Carbofuran was not detected in the sample submitted for analysis.  
DK 12473        Carbofuran was not detected in the sample submitted for analysis.  
DK 12474        Carbofuran was not detected in the sample submitted for analysis.  
DK 12475        Carbofuran was not detected in the sample submitted for analysis.  
DK 12476        Carbofuran was not detected in the sample submitted for analysis.  
DK 12477        Carbofuran was not detected in the sample submitted for analysis.  
DK 12478        Carbofuran was not detected in the sample submitted for analysis.  
DK 12373        Carbofuran was not detected in the sample submitted for analysis.  
DK 12479        Carbofuran was not detected in the sample submitted for analysis.  
DK 12480        Carbofuran was not detected in the sample submitted for analysis.  
DK 12481        Carbofuran was not detected in the sample submitted for analysis.  
DK 12329        Carbofuran was not detected in the sample submitted for analysis.

**EPA 525.2 (Case Narrative)**

Analytical results were designated as reportable based on the associated quality control samples. Deviations from method requirements are noted below.

**LFB:** Recoveries of metribuzin and trifluralin in the LFB at 1.0 µg/L were biased low outside the acceptance limits of 70-130% recovery.

**MS/MSD:** Recovery of simazine in the MS for sample DK 12329 was biased low outside the acceptance limits of 70-130% recovery.

**EPA 525.2 (Results Summary)**

- DK 12471        None of the requested parameters were detected in the sample submitted for analysis.
- DK 12472        None of the requested parameters were detected in the sample submitted for analysis.
- DK 12473        None of the requested parameters were detected in the sample submitted for analysis.
- DK 12474        None of the requested parameters were detected in the sample submitted for analysis.
- DK 12475        None of the requested parameters were detected in the sample submitted for analysis.
- DK 12476        None of the requested parameters were detected in the sample submitted for analysis.
- DK 12477        None of the requested parameters were detected in the sample submitted for analysis.
- DK 12478        None of the requested parameters were detected in the sample submitted for analysis.
- DK 12373        None of the requested parameters were detected in the sample submitted for analysis.
- DK 12479        None of the requested parameters were detected in the sample submitted for analysis.
- DK 12480        None of the requested parameters were detected in the sample submitted for analysis.
- DK 12481        None of the requested parameters were detected in the sample submitted for analysis.
- DK 12329        None of the requested parameters were detected in the sample submitted for analysis.

**EPA 515.1 (Case Narrative)**

Analytical results were designated as reportable based on the associated quality control samples. Deviations from method requirements are noted below.

**CCC:** Recovery of mecoprop in the final CCC at 2.0 µg/L was biased low outside the acceptance limits of 80-120% recovery.

**EPA 515.1 (Results Summary)**

- DK 12481        None of the requested parameters were detected in the sample submitted for analysis.
- DK 12329        None of the requested parameters were detected in the sample submitted for analysis.

Client: IDEM

Report #: 386258-342

**EPA 531.1 (Case Narrative)**

Analytical results were designated as reportable based on the associated quality control samples.

**EPA 531.1 (Results Summary)**

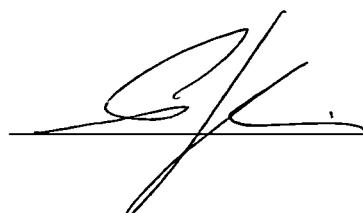
DK 12481      None of the requested parameters were detected in the sample submitted for analysis.

DK 12329      None of the requested parameters were detected in the sample submitted for analysis.

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We appreciate the opportunity to provide you with this analysis. If you have any questions concerning this report, please do not hesitate to call us at (219) 233-4777.

REVIEWED BY:



DATE: 8/27/99

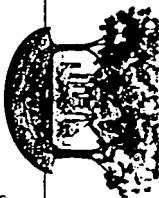
FINALIZED BY:



DATE: 9-3-99







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SI ADDITIONAL LAB USE ONLY

**CHAIN OF CUSTODY RECORD**

CLIENT COMPANY REDEFINING TEST STATE OF SAMPLE DESIGN

CLIENT/COMPANY ORDERING TEST		STATE OF SAMPLE ORIGIN		SAMPLER (Signature)	PWS ID#	PO#
EHL LAB#	COLLECTION DATE	SAMPLING SITE (ABN#) #	TEST NAME	SAMPLE REMARKS	# OF CONTAINERS	MATRIX CODE
386278	1/24 1035	AP DK 12475		525.2	1	
386279		AP		515.1	1	
386280		AP		531.1	2	
386281		AP		2,4-D	1	
386282	↓	AP		Carbofuran	1	
386283	1145	AP	DK 12476	525.3	1	
386284		AP		515.1	1	
386285		AP		531.1	2	
386286		AP		2,4-D	1	
386287	↓	AP		Carbofuran	1	
		AP				
		AP				

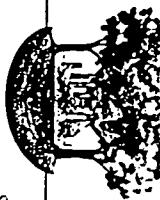
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RElinquished By: (Signature)	DATE	TIME	Received By: (Signature)	DATE	TIME	LAB COMMENTS	SAMPLE CONTAINER
RElinquished By: (Signature)	DATE	TIME	Received By: (Signature)	DATE	TIME	LAB COMMENTS	SAMPLE CONTAINER

NOMINATED PREPARATION		DATE	TIME	RECIPIENT/ARRIER/ROUTING	ITEM	ITEM
				<i>Spresso</i>	1/26	0945
					SHIPPING CONDITIONS: (Check One)	
					<input checked="" type="checkbox"/> Iced	<input type="checkbox"/> Ambient
					TEMPERATURE: _____ °C Lowest _____ °C Highest _____ °C Receipt	
TURN-AROUND-TIME (TAT) - SURCHARGES						

<b>DW</b>	= DRINKING WATER	<b>SW</b>	= STANDARD (5 WORKING DAYS) WRITTEN	<b>IV</b>	= IMMEDIATE (2 HOURS) VERBAL	<b>STAT</b> = LESS THAN 48 HOURS
<b>GW</b>	= GROUNDWATER	<b>RV</b>	= RUSH (5 WORKING DAYS) WRITTEN	<b>IW</b>	= IMMEDIATE (24 HOURS) WRITTEN	<b>Call</b>
<b>SW</b>	= SURFACE WATER	<b>RW</b>	= RUSH (5 WORKING DAYS) WRITTEN	<b>SP</b>	= WEEKEND, HOLIDAY	<b>Call</b>
<b>WW</b>	= WASTEWATER					<b>Call</b>
<b>PW</b>	= POOL WATER					<b>Call</b>

Samples received unanticipated with less than 48 hours holding time remaining may be subject to additional surcharges.



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SHOULD AREA FOR LAB USE ONLY

**CHAIN OF CUSTODY RECORD**

ORDER #

CLIENT/COMPANY ORDERING TEST ID#		NAME OF SAMPLE COLLECTOR IN		SAMPLE ID# (Signature)	PWS ID#	PO#
EHL LAB#	COLLECTION DATE	TIME	SAMPLING SITE (LAB ID#)	TEST NAME	SAMPLE REMARKS	# OF CONTAINERS
386288	1/24	1246	AP	DK 12477	525.2	1
386289			AP		515.1	1
386290			AP		531.1	2
386291			AP		2,4-D	1
386292			AP		Crocosfuran	1
386293		1405	AP	DK 12478	525.3	1
386294			AP		515.1	1
386295			AP		531.1	2
386296			AP		2,4-D	1
386297	✓		AP		Crocosfuran	1
			AP			
			AP			
			AP			

#### FIELD COMMENTS:

CARLTON

ALKI N.

COURT NO. \_\_\_\_\_ DATE SHIPPED

DATE: 5/11/2017

LAB RESERVES THE RIGHT TO RETURN UNUSED PORTIONS OF NON-ACHIEVABLE SAMPLES TO CLIENT.

OF NON-AQUEOUS SAMPLES TO OBTAIN  
Dr. Heinz OC/dm

RELINQUISHED BY: (Signature)

RECEIVED BY: (Signature)

## LAB COMMENTS

SAMPLE CONTAINER

**MATRIX CODES:** *(matrix codes)* *matrix* *matrix codes*

DATE	TIME	REMARKS
		SUGGEST

TURN-AROUND-TIME (TAT) -	10 AM	10 AM
1/26	0945	SHIPPING CONDITION TEMPERATURE:

SES One) Iced  Ambient  °C Highest \_\_\_\_\_ °C

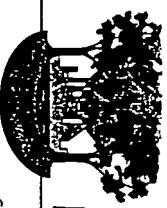
RW	= REAGENT WATER
DW	= DRINKING WATER
GW	= GROUNDWATER
SW	= SURFACE WATER
WW	= WASTEWATER
PW	= POOL WATER

**STANDARD 115 WORKING DAYS WRITTEN  
KUSI 115 WORKING DAYS VERBAL  
RUSH 15 WORKING DAYS WRITTEN**

**IV** :: NAME(DAIF (72 HOURS), VERBAL,  
**IN** - AMMELDAUT (12 HOURS) WRITING  
**SP** - WEEKEND, HOLIDAY

**STAT = LESS THAN 48 HOURS**

Samples received unaccompanied with less than 48 holding time remaining may be subject to additional surcharges.



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## CHAIN OF CUSTODY RECORD

PAGE 5 OF \_\_\_\_\_

CLIENT/COMPANY ORDERING TEST IDEM STATE OF SAMPLE ORIGIN IN

SAMPLER (Signature)	PWS ID#	PO#	# OF CONTAINERS	MATRIX CODE	TURNAROUND TIME	CUSTODY SEAL
<u>A.W.</u>						
TEST NAME						
SAMPLE REMARKS						
DATE SHIPPED						

EHL LAB#	COLLECTION DATE	TIME	SAMPLING SITE/LAB ID #	SAMPLER (Signature)	PWS ID#	PO#	# OF CONTAINERS	MATRIX CODE	TURNAROUND TIME	CUSTODY SEAL
<u>386298</u>	<u>1/27</u>	<u>1335</u>	<u>DK 12373</u>	<u>5</u>	<u>525.2</u>		<u>2</u>			
<u>386299</u>				<u>ms Invalid</u>						
<u>386300</u>				<u>msD</u>						
<u>386301</u>				<u>5</u>			<u>2</u>			
<u>386302</u>				<u>ms</u>						
<u>386303</u>				<u>msD</u>						
<u>386304</u>				<u>5</u>			<u>3</u>			
<u>386305</u>				<u>ms</u>						
<u>386306</u>				<u>msD</u>						
<u>386307</u>				<u>5</u>			<u>2</u>			
<u>386308</u>				<u>ms</u>						
<u>386309</u>				<u>msD</u>						
<u>386310</u>				<u>5</u>			<u>2</u>			
				<u>Carboxfuran</u>						
FIELD COMMENTS: <u>386311</u>	CARRIER		AIRBILL NO. <u>ms</u>	Invited						
RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)	DATE	TIME					
RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED FOR LABORATORY BY:	DATE	TIME					

LAB RESERVES THE RIGHT TO RETURN UNUSED PORTIONS OF NON-AQUEOUS SAMPLES TO CLIENT.

### LAB COMMENTS:

QC exceeds P.D.E. requirements as per R.R.  
515 and 531 are unlikely unrepresentative for confirmation

SHIPPING CONDITIONS (Check One):  Iced  Ambient  4 °C Lowest  Highest  4 °C Receipt

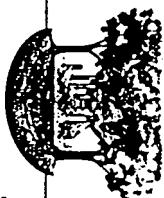
### MATRIX CODES:

RW = REAGENT WATER  
DW = DRINKING WATER  
GW = GROUNDWATER  
SW = SURFACE WATER  
WW = WASTEWATER  
PW = POOL WATER

### TURN-AROUND-TIME (TAT) - SURCHARGES

SW = STANDARD (15 WORKING DAYS) WRITTEN 0% IV = IMMEDIATE (72 HOURS) VERBAL 100% STAT = LESS THAN 48 HOURS  
RV = RUSH (5 WORKING DAYS) VERBAL 50% IW = IMMEDIATE (12 HOURS) WRITTEN 125% Call  
SP = WEEKEND/HOLIDAY 75% Call

Samples received unannounced with less than 48 hours holding time remaining may be subject to additional surcharges.



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ORDER #

CLIENT/COMPANY ORDERING TEST STATE OF SAMPLE ORIGIN

SI TRADE AREA OR LAB USE ONLY

UNDEK #

CLIENT/COMPANY ORDERING TEST ID#		STATE OF SAMPLE ORIGIN		SAMPLE NUMBER	PWS ID#	PO#
EHL LAB#	COLLECTION DATE	TIME	SAMPLING SITE/ABL#	TEST NAME	SAMPLE REMARKS	# OF CONTAINERS
3846313	1/29	1215	AP	DK 12479	525.2	1
3846314			AP		515.1	1
3846315			AP	Invalid	531.1	2
3846316			AP		2,4-D	1
3846317		✓	AP		Crobofuran	1
3846318		1340	AP	DK 12480	525.2	1
3846319			AP	Invalid	515.1	1
3846320			AP		531.1	2
3846321			AP		2,4-D	1
3846322	↓		AP		Crobofuran	1
			AP			
			AP			
			AP			

FIELD COMMENTS

ARTICLE NO.

COOKIER NO. \_\_\_\_\_ DATE SHIPPED \_\_\_\_\_

DATE STAMPED

LAB RESERVES THE RIGHT TO RETURN UNUSED PORTIONS OF NON-AQUEOUS SAMPLES.

RELINQUISHED BY: (Signature)

DATE

LAB COMMENTS

104

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**SAMPLE CONTAINER**

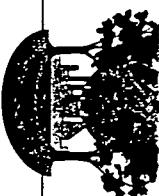
## TURN-AROUND-TIME (TAT) - SURCHARGE!

**MATRIX COBES:**  
**RW** = REAGENT WATER  
**DW** = DRINKING WATER  
**GW** = GROUNDWATER  
**SW** = SURFACE WATER  
**WW** = WASTEWATER  
**PW** = POOL WATER  
**SW** = STANDARD (15 WORKING DAYS) WRITTEN  
**RV** = RUSSIAN WORKING (145) VIBRAT  
**RW** = RUSSIAN WORKING (145) WRITTEN

**TURN-AROUND-TIME (TAT) -**

**STAT** = LESS THAN 48 HOURS  
Samples received unaccompanied with less than 48 hours holding time remaining may be subject to additional surcharges.





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ORDER #

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**CHAIN OF CUSTODY RECORD**

**CLIENT/COMPANY ORDERING TEST**

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PAGE  
8  
OR

CLIENT/COMPANY ORDERING TEST		STATE OF SAMPLE ORIGIN		SAMPLER (Signature)	PWS ID#	PO#
IDCM		IN		PD		
EHL LAB#	COLLECTION DATE	SAMPLING SITE/LAB ID # TIME	TEST NAME	SAMPLE REMARKS	# OF CONTAINERS	MATRIX CODE
386328	1/25	1600 APR	DK 12329	5	525,2	
386329		AP	ms			
386330		AP	MSD			
386331		AP	5			
386332		AP	MS			
386333		AP	MSD			
386334		AP	5			
386335		AP	MS			
386336		AP	MSD			
386337		AP	5			
386338		AP	MS			
386339		AP	MSD			
386340		AP	5			
<b>FIELD COMMENTS:</b> 386341	CARRIER	AIRBILL NO.	COOLER NO.	DATE SHIPPED		
		386342				
<b>LAB RESERVES THE RIGHT TO RETURN UNUSED PORTIONS OF NON-AQUEOUS SAMPLES TO CLIENT.</b>						
RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)	DATE	TIME	<b>LAB COMMENTS</b>
RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED FOR LABORATORY BY:	DATE	TIME	SHIPPING CONDITIONS: (Check One)
<b>MATRIX CODES:</b> RW = REAGENT WATER DW = DRINKING WATER GW = GROUNDWATER SW = SURFACE WATER WW = WASTEWATER PW = POOL WATER	SW = STANDARD (5 WORKING DAYS) WRITTEN <b>RV</b> = RUSH (5 WORKING DAYS) VERBAL <b>RW</b> = RUSH (5 WORKING DAYS) WRITTEN SP = WEEKEND, HOLIDAY	0% 50% 75%	IV = IMMEDIATE (2 HOURS) VERBAL <b>IW</b> = IMMEDIATE (72 HOURS) WRITTEN SP = WEEKEND, HOLIDAY	100% 125% Call	TEMPERATURE: <u>2/2</u> °C 2/30 °C Iced	<b>STAT</b> = LESS THAN 48 HOURS Samples received unannounced with less than 48 hours holding time remaining may be subject to additional surcharges. 5 °C Receipt
<b>TURN-AROUND-TIME (TAT) - SURCHARGES</b>						
CLIENT RECEIVED SAMPLE CONSIDERED						
Surcharges apply to samples received unannounced with less than 48 hours holding time remaining.						



INDIANA DEPARTMENT OF  
ENVIRONMENTAL MANAGEMENT

OWM

OSHWM

OER

OAM

CHAIN OF CUSTODY

I certify that the sample(s) listed below was/were collected by me or in my presence.

Signature: Catherine B. Talbot

Date: 01/25/99  
Section: Ground Water

LAB NUMBER ASSIGNED	ITEM CONTROL NUMBER	CONSISTING OF THE INDICATED NUMBER OF BOTTLES										DATE AND TIME COLLECTED
		2000 ml P.N.M.	1000 ml P.N.M.	1000 ml G.N.M.	500 ml G.W.M.	40 ml VIAL	120 ml G.(B.O.)	600 ml P.N.M.	250 ml P.N.M.			
DK 12465	only 175	2		4								1/22/99 1:30 PM
DK 12466	mcvd	23 dm	2	4								1/22/99 3:00 PM
DK 12467		2		4								1/22/99 4:10 PM
DK 12468		2		4								1/23/99 10:10 AM
DK 12469		2		4								1/23/99 11:20 AM
DK 12470		6		12								1/23/99 12:25 PM
DK 12471		2		4								1/23/99 1:45 PM
DK 12472		2		4								1/23/99 2:45 PM
DK 12473		2		4								1/23/99 4:00 PM
DK 12474		2		4								1/23/99 5:30 PM
DK 12475		2		4								1/24/99 10:35 AM
DK 12476		2		4								1/24/99 11:45 AM

P - Plastic

G - Glass

N.M. - Narrow Mouth

W.M. - Wide Mouth

B.O. - Bacti. Only

I certify that I received the above sample(s).

CARRIERS

Should samples be iced?

Y  N

SIGNATURE	DATE AND TIME	SEALS INTACT	COMMENTS
RELINQUISHED BY: Catherine B. Talbot	01/25/99		X LABEL'S MAY COME OFF BOTTLES, HAVE WRITTEN PK NUMBERS ON
RECEIVED BY: SGP 820 12699 0945	6:00 AM/PM	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
RELINQUISHED BY:	/ /		
RECEIVED BY:	: AM/PM	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	CAPS AND TESTS EG IMMUNO ASSAY...
RELINQUISHED BY:	/ /		
RECEIVED BY:	: AM/PM	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	LABELS MAY STILL BE IN BAGS IE NOT IN BOTTLES
RELINQUISHED BY:	/ /		
RECEIVED BY:	: AM/PM	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
RELINQUISHED BY:	/ /		
RECEIVED BY:	: AM/PM	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	

LAB CUSTODIAN

I certify that I received the above sample(s) and is/are recorded in the official record book. The same sample(s) will be in the custody of complete laboratory personnel at all times or locked in a secured area.

Signature: \_\_\_\_\_ Date: \_\_\_\_ / \_\_\_\_ / \_\_\_\_ Time: \_\_\_\_ : \_\_\_\_ :

Lab: \_\_\_\_\_ Address: \_\_\_\_\_



INDIANA DEPARTMENT OF  
ENVIRONMENTAL MANAGEMENT

UWM

OSIHW.M

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□ i OAAs

## **CHAIN OF CUSTODY**

I certify that the sample(s) listed below was/were collected by me or in my presence.

Signature: Catherine S Talbot

Date: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_  
Section: Ground Water

## P - Plastic

### G-Glass

#### NM - Narrow Mouth

#### W.M. Wide Mouth

80 Easy Quilts

I certify that I received the above sample(s).

## CARRIERS

### Should samples be Iced?

Y N

SIGNATURE	DATE AND TIME	SEALS INTACT	COMMENTS
RELINQUISHED BY: Catherine B Talbot	1/25/99 6:00 AM/PM	Y N	LABELS MAY BE LOSE
RECEIVED BY: Sherry 1/26/99			
RELINQUISHED BY: 0945	/ /		
RECEIVED BY:	: AM/PM	Y N	
RELINQUISHED BY:	/ /		
RECEIVED BY:	: AM/PM	Y N	
RELINQUISHED BY:	/ /		
RECEIVED BY:	: AM/PM	Y N	
RELINQUISHED BY:	/ /		
RECEIVED BY:	: AM/PM	Y N	

**LAB CUSTODIAN**

I certify that I received the above sample(s) and is/are recorded in the official record book. The same sample(s) will be in the custody of competent laboratory personnel at all times or locked in a secured area.

**Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **by:** \_\_\_\_\_

Lab: \_\_\_\_\_ Date: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ Time: \_\_\_\_\_

### **Address:**



**INDIANA DEPARTMENT of ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER MANAGEMENT  
GROUND WATER SECTION**

## **ASSIGNED LAB: EHL**

Date Submitted:	1/25/99	Sample Nos Submitted Today:	DK 12465 to DK 12478
Project:	MONITORING NETWORK	Assigned IDEM Sample Nos:	[REDACTED]
Matrix:	Ground Water	Sampler:	[REDACTED]

## **TASKS &/OR PARAMETERS TO DETERMINE**

**APPROXIMATE CONCENTRATIONS: 10ppm**

**REPORTING TIME REQUIRED: 30 DAYS**

**Comments:**

**Please Send Report To:**

Mitt Denney  
IDEM  
Shadeland, Ground Water Section  
P.O. Box 6015  
Indianapolis, IN 46206-6015



INDIANA DEPARTMENT OF  
ENVIRONMENTAL MANAGEMENT

 OWM

OSHW.M

OER

OAM

## CHAIN OF CUSTODY

I certify that the sample(s) listed below was/were collected by me or in my presence.

Date: 1 / 27 / 97

**Signatures:**

## Section

P · Plastic

G · Glass

N.M. - Narrow Mouth

W.M. - Wide Mouth

B.O. - Bactl. Only

I certify that I received the above sample(s).

## CARRIERS.

Should samples be iced?

Y N

SIGNATURE	DATE AND TIME	SEALS INTACT		COMMENTS
RELINQUISHED BY: <i>Angie Scherzer</i>	1/27/99 1:00 AM/PM	Y	N	CLIENT PROVIDED SAMPLE CONTAINER
RECEIVED BY: <i>SSgt. 0930</i>				
RELINQUISHED BY:	/ /	Y	N	40C 55
RECEIVED BY:	: AM/PM			
RELINQUISHED BY:	/ /	Y	N	
RECEIVED BY:	: AM/PM			
RELINQUISHED BY:	/ /	Y	N	
RECEIVED BY:	: AM/PM			
RELINQUISHED BY:	/ /	Y	N	
RECEIVED BY:	: AM/PM			

**LAB CUSTODIAN**

I certify that I received the above sample(s) and is/are recorded in the official record book. The same sample(s) will be in the custody of competent laboratory personnel at all times or locked in a secured area.

Signature:

Date: \_\_\_\_ / \_\_\_\_ / \_\_\_\_ Time: \_\_\_\_ : \_\_\_\_ AM

Lab:

**Address:**



**INDIANA DEPARTMENT of ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER MANAGEMENT  
GROUND WATER SECTION**

## ASSIGNED LAB: EHL

Date Submitted:	1/27/99	Sample Nos Submitted Today:	DK 12373 to DK 12370
Project:	MONITORING NETWORK	Assigned IDEM Sample Nos:	DK to DK 12340-12425
Matrix:	Ground Water	Sampler:	A MANNER

## **TASKS &/OR PARAMETERS TO DETERMINE**

**APPROXIMATE CONCENTRATIONS: 10ppm**

**REPORTING TIME REQUIRED: 30 DAYS**

**Comments:**

SPINE.

**Please Send Report To:**

Mitt Denney  
IDEM  
Shadeland, Ground Water Section  
P.O. Box 6015  
Indianapolis, IN 46206-6015



INDIANA DEPARTMENT OF  
ENVIRONMENTAL MANAGEMENT

OWM

OSIHW.M

QFR

000

## **CHAIN OF CUSTODY**

I certify that the sample(s) listed below was/were collected by me or in my presence.

Date: 2 / 1 / 99  
Section: Ground Water

P - Plastic

## G - Glass

#### N.M. - Narrow Mouth

W.M. - Wide Mouth

B<sub>2</sub>O<sub>5</sub> - Bacti Only

I certify that I received the above sample(s).

## CARRIERS

Should samples be iced?

Y N

SIGNATURE	DATE AND TIME	SEALS INTACT	COMMENTS
RELINQUISHED BY: <i>Cathene B Talbot</i>	2/1/99 5:30 AM/PM	Y N	
RECEIVED BY:			
RELINQUISHED BY:	2/2/99	Y N	
RECEIVED BY: <i>Mindy Short</i>	09:30 AM/PM		
RELINQUISHED BY:	/ /	Y N	
RECEIVED BY:	: AM/PM		
RELINQUISHED BY:	/ /	Y N	
RECEIVED BY:	: AM/PM		
RELINQUISHED BY:	/ /	Y N	
RECEIVED BY:	: AM/PM		

**LAB CUSTODIAN**

I certify that I received the above sample(s) and is/are recorded in the official record book. The same sample(s) will be in the custody of complete laboratory personnel at all times or locked in a secured area.

**Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

Lab: \_\_\_\_\_ Address: \_\_\_\_\_



**INDIANA DEPARTMENT of ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER MANAGEMENT  
GROUND WATER SECTION**

## **ASSIGNED LAB: EHL**

Date Submitted:	2/1/99	Sample Nos Submitted Today:	DK 12479	to DK 12481
Project:	MONITORING NETWORK	Assigned IDEM Sample Nos:	DK	to DK
Matrix:	Ground Water	Sampler:		

## **TASKS &/OR PARAMETERS TO DETERMINE**

## **APPROXIMATE CONCENTRATIONS: 10ppm**

**REPORTING TIME REQUIRED: 30 DAYS**

### **Comments:**

**Please Send Report To:**

Mitt Denney  
IDEM  
Shadeland, Ground Water Section  
P.O. Box 6015  
Indianapolis, IN 46206-6015



INDIANA DEPARTMENT OF  
ENVIRONMENTAL MANAGEMENT

To EHL

QWM

1

OSHWM

1

OER

1

OAM

## **CHAIN OF CUSTODY**

I certify that the sample(s) listed below was/were collected by me or in my presence.

Date: 12 / 1 / 97

Signature: Tamela Dugan

Section: Groundwater

### P - Plastic

## G - Glass

N.M. - Narrow Mouth

W.M. - Wide Mouth

B.O. - Bacti. Only

I certify that I received the above sample(s).

## CARRIERS.

Should samples be Iced?

N

SIGNATURE	DATE AND TIME	SEALS INTACT		COMMENTS
RELINQUISHED BY: <i>Pamela Dugan</i>	2 / 1 / 99	Y	N	
RECEIVED BY:	: AM/PM			
RELINQUISHED BY:	2 / 2 / 99	Y	N	
RECEIVED BY: <i>Mindy Short</i>	09:45 AM/PM			
RELINQUISHED BY:	/ /	Y	N	
RECEIVED BY:	: AM/PM			
RELINQUISHED BY:	/ /	Y	N	
RECEIVED BY:	: AM/PM			
RELINQUISHED BY:	/ /	Y	N	
RECEIVED BY:	: AM/PM			

**LAB CUSTODIAN**

I certify that I received the above sample(s) and is/are recorded in the official record book. The same sample(s) will be in the custody of competent laboratory personnel at all times or locked in a secured area.

Signature:

Date: \_\_\_\_ / \_\_\_\_ / \_\_\_\_ Time: \_\_\_\_ : \_\_\_\_ A.M.

198

**Address:**



**INDIANA DEPARTMENT of ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER MANAGEMENT  
GROUND WATER SECTION**

## **ASSIGNED LAB: EHL**

Date Submitted:	2-1-99	Sample Nos Submitted Today:	DK	— to DK	12329
Project:	MONITORING NETWORK	Assigned IDEM Sample Nos:	[REDACTED]		
Matrix:	Ground Water	Sampler:	[REDACTED]	[REDACTED]	PD

## **TASKS &/OR PARAMETERS TO DETERMINE**

**APPROXIMATE CONCENTRATIONS: 10ppm**

**REPORTING TIME REQUIRED: 30 DAYS**

**Comments:**

**Please Send Report To:**

Mitt Denney  
IDEM  
Shadeland, Ground Water Section  
P.O. Box 6015  
Indianapolis, IN 46206-6015

## ENVIRONMENTAL HEALTH LABORATORIES

Page 1 of 2

## 2 - 4 - D ANALYSIS RESULT SHEET

Method: Enzyme Immunoassay - Qualitative  
 Run Date: 02/04/99 Run Time: 09:00  
 LOT #: Standard 1: 8G1216  
 Standard 2: 8G1215  
 Standard 3: Not Used  
 Control Solution: 8G1213  
 Diluent/Zero Solution: 8G1015

Analyst: NM  
 Project(s): IDEM / Pesticide Monitoring Network  
 Enzyme Conjugate: 8G1071  
 Standard Warmup Time:  
 Stopping Solution: 8E1259  
 Washing Solution: 8F1245  
 Color Solution: 8G1016  
 Magnetic Particles: 8G1070

Instrument ID: B&L Spectronic 21  
 Run ID #: 17060  
 Standard 21 Setting: 450  
 Curve Date: 01/28/99  
 Kit Lot: 8G1240  
 in use: 01/28/99

Seq Num	Lab ID #	Client	Sample Description	Sample Type	Matrix	Absorbance (nm) Rx	Bx x 100	Calcd PPB	Final Result	% Rec	Q
1			Diluent/Zero	0.0 ug/L	LMB	RW	1.498				
2			Diluent/Zero	0.0 ug/L	LMB	RW	1.540				
3			Standard	1.0 ug/L	ICS	RW	1.225	80.6	1.0	Present	100
4			Standard	1.0 ug/L	ICS	RW	1.183	77.9	1.3	Present	130
5			Control	3.5 ug/L	QCS	RW	0.985	64.8	3.4	Present	97
6	386261	IDEM	DK12471	FS	GW	1.700	111.9	<1.0	Absent		
7	386266	IDEM	DK12472	FS	GW	1.650	108.6	<1.0	Absent		
8	386271	IDEM	DK12473	FS	GW	1.530	100.7	<1.0	Absent		
9	386276	IDEM	DK12474	FS	GW	1.570	103.4	<1.0	Absent		
10	386281	IDEM	DK12475	FS	GW	1.483	97.6	<1.0	Absent		
11	386286	IDEM	DK12476	FS	GW	1.670	109.9	<1.0	Absent		
12	386291	IDEM	DK12477	FS	GW	1.570	103.4	<1.0	Absent		
13	386296	IDEM	DK12478	FS	GW	1.550	102.0	<1.0	Absent		
14	386307	IDEM	DK12373	FS	GW	1.600	105.3	<1.0	Absent		
15	386316	IDEM	DK12479	FS	GW	1.600	105.3	<1.0	Absent		
16			Diluent/Zero	0.0 ug/L	LMB	RW	1.448	95.3	<1.0	Absent	
17			Standard	1.0 ug/L	CCC	RW	1.185	78.0	1.25	Present	125
18	386321	IDEM	DK12480	FS	GW	1.560	102.7	<1.0	Absent		
19	386326	IDEM	DK12481	FS	GW	1.590	104.7	<1.0	Absent		
20	386337	IDEM	DK12329	FS	GW	1.560	102.7	<1.0	Absent		
21	386338	IDEM	DK12329 / Matrix Spike	MS	GW	0.821	54.0	7.5	Present	107	
22	386339	IDEM	DK12329 / Matrix Spike Duplicate	MSD	GW	0.827	54.4	7.5	Present	107	

Comments: \_\_\_\_\_

## ENVIRONMENTAL HEALTH LABORATORIES

Page 2 of 2

## 2 - 4 - D ANALYSIS RESULT SHEET

Method: Enzyme Immunoassay - Qualitative  
 Run Date: 02/04/99 Run Time: 09:00  
 LOT # Standard 1: 8G1216  
 Standard 2: 8G1215  
 Standard 3: Not Used  
 Control Solution: 8G1213  
 Diluent/Zero Solution: 8G1015

Analyst: NM  
 Project(s): IDEM / Pesticide Monitoring Network  
 Enzyme Conjugate: 8G1071  
 Stopping Solution: 8E1259  
 Washing Solution: 8F1245  
 Color Solution: 8G1016  
 Magnetic Particles: 8G1070

Instrument ID: B&L Spectronic 21  
 Run ID #: 17060  
 Standard Warmup Time:  
 Spectronic 21 Setting: 450  
 Curve Date: 01/28/99  
 Kit Lot: 8G1240  
 in use: 01/28/99

Seq Num	Lab ID #	Client	Sample Description	Sample Type	Matrix	Absorbance (nm)	Bx x 100	Calcd. PPB	Final Result	% Rec.	Q
23			Diluent/Zero	0.0 ug/L	LMB	RW	1.343	88.4	<1.0	Absent	
24			Standard	1.0 ug/L	CCC	RW	1.155	76.0	1.5	Present	150
25											
26											
27											
28											
29											
30											
31											
32											
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42											
43											
44											

Comments: \_\_\_\_\_

**ENVIRONMENTAL HEALTH LABORATORIES**

Page 1 of 2

**CARBOFURAN ANALYSIS RESULT SHEET**

Method: Enzyme Immunoassay - Qualitative  
 Run Date: 02/04/99 Run Time: 14:00  
 LOT # Standard 1: Not Used

Standard 2: 810190  
 Standard 3: 810191  
 Control Solution: 8J0192  
 Diluent/Zero Solution: 8F1161

Analyst: NM  
 Project(s): IDEM / Pesticide Monitoring Network  
 Enzyme Conjugate: 810167

Stopping Solution: 8E1259  
 Washing Solution: 8C1031  
 Color Solution: 8G1178  
 Magnetic Particles: 810168

Instrument ID: B&L Spectronic 21  
 Run ID #: 17062  
 Standard Warmup Time:  
 Spectronic 21 Setting: 450

Curve Date: 10/15/98  
 Kit Lot: 8J0210  
 in use : 01/29/99

Seq Num	Lab ID #	Client	Sample Description	Type	Min/Max	Absorbance (nm)	Bx/B0	Calc. PPB	Final Result	% Rec.	Q
1			Diluent/Zero	0.0 ug/L	LMB	RW	1.740				
2			Standard2	1.0 ug/L	ICS	RW	0.920	51.8	0.9	Present	90
3			Standard2	1.0 ug/L	ICS	RW	0.851	47.9	1.1	Present	110
4			Control	2.0 ug/L	QCS	RW	0.702	39.5	1.8	Present	90
5					FS	GW	1.455	82.0	< 1.0	Absent	
6	386262	IDEM	DK12471		FS	GW	1.860	104.8	< 1.0	Absent	
7	386267	IDEM	DK12472		FS	GW	1.810	102.0	< 1.0	Absent	
8	386272	IDEM	DK12473		FS	GW	1.780	100.3	< 1.0	Absent	
9	386277	IDEM	DK12474		FS	GW	1.790	100.8	< 1.0	Absent	
10	386282	IDEM	DK12475		FS	GW	1.850	104.2	< 1.0	Absent	
11	386287	IDEM	DK12476		FS	GW	1.890	106.5	< 1.0	Absent	
12	386292	IDEM	DK12477		FS	GW	1.780	100.3	< 1.0	Absent	
13	386297	IDEM	DK12478		FS	GW	1.820	102.5	< 1.0	Absent	
14	386310	IDEM	DK12373		FS	GW	1.690	95.2	< 1.0	Absent	
15	386317	IDEM	DK12479		FS	GW	1.820	102.5	< 1.0	Absent	
16			Standard2	0.0 ug/L	LMB	RW	1.770	99.7	< 1.0	Absent	
17			Diluent/Zero	1.0 ug/L	CCC	RW	0.852	48.0	1.1	Present	110
18	386322	IDEM	DK12480		FS	GW	1.650	93.0	< 1.0	Absent	
19	386327	IDEM	DK12481		FS	GW	1.900	107.0	< 1.0	Absent	
20	386340	IDEM	DK12329		FS	GW	1.910	107.6	< 1.0	Absent	
21	386341	IDEM	DK12329 / Matrix Spike		MS	GW	0.664	37.4	2.1	Present	105
22	386342	IDEM	DK12329 / Matrix Spike Duplicate		MSD	GW	0.646	36.4	2.2	Present	110

Comments:

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## ENVIRONMENTAL HEALTH LABORATORIES

Page 2 of 2

## CARBOFURAN ANALYSIS RESULT SHEET

Method: Enzyme Immunoassay - Qualitative  
 Run Date: 02/04/99 Run Time: 14:00  
 LOT #: Standard 1: Not Used  
 Standard 2: 8J0190  
 Standard 3: 8J0191  
 Control Solution: 8J0192  
 Diluent/Zero Solution: 8F1161

Analyst: NM  
 Project(s): IDEM / Pesticide Monitoring Network  
 Enzyme Conjugate: 8J0167  
 Stopping Solution: 8E1259  
 Washing Solution: 8C1031  
 Color Solution: 8G1178  
 Magnetic Particles: 8J0168

Instrument ID: B&L Spectromic 21  
 Run ID #: 17062  
 Standard Warmup Time:  
 Spectronic 21 Setting: 450  
 Curve Date: 10/15/98  
 Kit Lot: 8J0210  
 in use: 01/29/99

Seq Num	Lab ID #	Client	Sample Description	Sample Type	Matrix	Absorbance (nm) BX	E <sub>B3100</sub> E <sub>B0</sub>	Calcd. TAB	Final Result	T <sub>3</sub> Req	Q
23			Diluent/Zero	0.0 ug/L	LMB	RW	1.730	97.5	<1.0	Absent	
24			Standard2	1.0 ug/L	CCC	RW	0.832	46.9	1.2	Present	120
25											
26											
27											
28											
29											
30											
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44											

Comments: \_\_\_\_\_

**PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED - GC/MS TUNING  
AND MASS CALIBRATION - Decafluorotriphenylphosphine (DFTPP)**

Lab Name: Environmental Health Laboratories Lab ID: unknown Acq. File: A021099A  
Contract: BAA 97-044 Task: 4A Data Directory: AE\021099A  
Project: IDEM / Pesticide Monitoring Network Case: n/a Initial Cali File: 0928F0AE  
Column: Restek XTI-5 30m x 0.25mm ID Method: 525.2 Instrument ID: GC/MS-AE

m/e	Ion/Abundance Criteria	% Rel Abundance	Q	Matrix	Code
51	10 to 80% of base peak	23.93		Reagent Water	RW
68	< 2% of Mass 69	0.00		Surface Water	SW
70	< 2% of Mass 69	0.00		Drinking Water	DW
127	10 to 80% of base peak	24.70		Ground Water	GW
197	< 2% of Mass 198	0.00		Waste Water	WW
198	base peak or > 50 % of mass 442	100.00		Sediment	SE
199	5 to 9% of mass 198	8.76		Soil	SO
275	10 to 60% of base peak	20.17		Sludge	SL
365	> 1% of base peak	4.04		Other Solvents	OS
441	Present and < mass 443	15.25		TCLP Leachate	TC
442	base peak or > 50 % of mass 198	81.46		Hazardous Waste	HW
443	15 to 24% of mass 442	19.21		Contamination Levels: L=Low M=Medium H=High	

	Sample No. / Sample Description	Data File / Sample ID	Date Analyzed	Time Analyzed	Matrix Code	Contm. Level
1	Tune 1	TI-DFN1	02/10/99	15:59	OS	
2	SPCC	S-525A	02/10/99	16:26	OS	
3	Continuing Calibration Check A	C-2-18A	02/10/99	17:07	OS	
4	Laboratory Method Blank A	MB-525A	02/10/99	18:04	RW	
5	Laboratory Fortified Blank A	FB-525A	02/10/99	18:39	RW	
6	DK 12471	386258	02/10/99	19:13	GW	L
7	DK 12472	386263	02/10/99	19:48	GW	L
8	DK 12473	386268	02/10/99	20:22	GW	L
9	DK 12474	386273	02/10/99	20:57	GW	L
10	DK 12475	386278	02/10/99	21:31	GW	L
11	DK 12476	386283	02/10/99	22:06	GW	L
12	DK 12477	386288	02/10/99	22:40	GW	L
13	DK 12478	386293	02/10/99	23:15	GW	L
14	DK 12373	386298	02/10/99	23:49	GW	L
15	DK 12479	386313	02/11/99	00:24	GW	L
16	DK 12480	386318	02/11/99	00:58	GW	L
17	DK 12481	386323	02/11/99	01:33	GW	L
18	DK 12329	386328	02/11/99	02:08	GW	L
19	DK 12329 Matrix Spike	386329-S	02/11/99	02:42	GW	
20	DK 12329 Matrix Spike Duplicate	386330-SD	02/11/99	03:17	GW	
21	Continuing Calibration Check B	C-2-18B	02/11/99	05:36	OS	
22						
23						
24						

Q = A flag or qualifier indicating possible cause for an out of range or failed result.

Comments: \_\_\_\_\_  
\_\_\_\_\_

**PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED  
LABORATORY PERFORMANCE CHECK**

Lab Name: Environmental Health Laboratories      Lab ID: unknown      Acq. File: A021099A  
 Contract: BAA 97-044      Task: 4A      Data Directory: AE\021099A  
 Project: IDEM / Pesticide Monitoring Network      Case: n/a      Initial Cali File: 0928F0AE  
 Column: Restek XTI-5 30m x 0.25mm ID      Method: 525.2      Instrument ID: GC/MS-AE  
 Data File: S-525A

Compound	Test	Conc. ug/ml	Requirements	Result	Pass/Fail	Q
Bromacil	Chromatographic Performance	5.0	0.80 < PGF < 1.20 (a)	0.92	Pass	
Atrazine Prometon	Column Performance	0.15 0.30	Resolution > 0.7 (b)	1.06	Pass	
Endrin	Abundance of degradation to Endrin Aldehyde	2.0	< 10% endrin aldehyde	< 10%	Pass	
4,4' - DDT	Abundance of degradation to 4,4' - DDD & 4,4' - DDE		< 10% 4,4'-DDD & 4,4'-DDE	< 10%	Pass	

Q = A flag or qualifier indicating possible cause for an out of range or failed result.

(a) PGF - peak Gaussian factor. Calculated using the equation:

$$\text{PGF} = \frac{1.83 \times W(1/2)}{W(1/10)}$$

where W(1/2) is the peak width at half height and W(1/10) is the peak width at tenth height.

(b) Resolution between the two peaks as defined by the equation:

$$R = \frac{t}{w}$$

where t is the difference in elution times between the two peaks and W is the average peak width, at the baseline, of the two peaks.

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Environmental Health Laboratories  
Continuing Calibration Check Check**

**File Name:** C-2-18A  
**Acquisition File:** A021099A  
**Data Directory:** 021099A  
**Today's Date:** 1999/08/10  
**Instrument:** GC/MS - AE  
**Extracted Date:** Not Available  
**Sample Number:** 387535

**Method:** 525.2  
**Calibration File:** 0928F0AE  
**Analysis Date:** 1999/02/10  
**Analysis Time:** 17:07  
**Analyst:** toms  
**Results Submitted By:** toms  
**Run Number:** 17122

**Sample Description:** CCC A

**Sample Quality Control**

<u>CAS No.</u>	<u>Parameter</u>	Limits				
		<u>Amount</u>	<u>Units</u>	<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>
N/A	IS-Pyrene-d10	5.0	ug/L	100.0	70.0	130.0

**Ordered Parameter Results**

<u>CAS No.</u>	<u>Parameter</u>	Limits						
		<u>Target</u>	<u>Amount</u>	<u>Units</u>	<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>	<u>Pass/Fail</u>
34256-82-1	Acetochlor	2.0	2.06	ug/L	103.0	70.0	130.0	PASS
15972-60-8	Alachlor	2.0	1.936	ug/L	96.8	70.0	130.0	PASS
1912-24-9	Atrazine	2.0	2.379	ug/L	118.95	70.0	130.0	PASS
314-40-9	Bromacil	2.0	1.747	ug/L	87.35	70.0	130.0	PASS
21725-46-2	Cyanazine	2.0	1.946	ug/L	97.3	70.0	130.0	PASS
333-41-5	Diazinon	2.0	2.406	ug/L	120.3	70.0	130.0	PASS
959-98-8	Endosulfan I	2.0	2.174	ug/L	108.7	70.0	130.0	PASS
33213-65-9	Endosulfan II	2.0	2.283	ug/L	114.15	70.0	130.0	PASS
1031-07-8	Endosulfan sulfate	2.0	2.037	ug/L	101.85	70.0	130.0	PASS
22224-92-6	Fenamiphos	2.0	1.69	ug/L	84.5	70.0	130.0	PASS
51218-45-2	Metolachlor	2.0	1.943	ug/L	97.15	70.0	130.0	PASS
21087-64-9	Metribuzin	2.0	1.947	ug/L	97.35	70.0	130.0	PASS
40487-42-1	Pendimethalin	2.0	1.945	ug/L	97.25	70.0	130.0	PASS
1610-18-0	Prometon	2.0	2.146	ug/L	107.3	70.0	130.0	PASS
1918-16-7	Propachlor	2.0	2.083	ug/L	104.15	70.0	130.0	PASS
122-34-9	Simazine	2.0	1.681	ug/L	84.05	70.0	130.0	PASS
13071-79-9	Terbufos	2.0	1.667	ug/L	83.35	70.0	130.0	PASS
1582-09-8	Trifluralin	2.0	1.691	ug/L	84.55	70.0	130.0	PASS

**Environmental Health Laboratories**  
**Laboratory Method Blank Check**

**File Name:** MB-525A  
**Acquisition File:** A021099A  
**Data Directory:** 021099A  
**Instrument:** GC/MS - AE  
**Extracted Date:** 1999/02/05  
**Sample Number:** 387537  
**Sample Location:** Not Available  
**Sample Description:** LMB A L

**Method:** 525.2  
**Calibration File:** 0928F0AE  
**Analysis Date:** 1999/02/10  
**Analysis Time:** 18:04  
**Analyst:** toms  
**Results Submitted By:** toms  
**Run Number:** 17122

**Sample Quality Control**

<u>CAS No.</u>	<u>Parameter</u>	Limits				
		<u>Amount</u>	<u>Units</u>	<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>
877-09-8	SS-2,4,5,6-Tetrachloro-m-xylene	4.646	ug/L	94.24	70.0	130.0
2050-68-2	SS-4,4'-Dichlorobiphenyl	4.855	ug/L	98.48	70.0	130.0
82-68-8	SS-Pentachloronitrobenzene	5.066	ug/L	102.76	70.0	130.0
N/A	IS-Pyrene-d10	5.0	ug/L	110.97	70.0	130.0
115-86-6	SS-Triphenylphosphate	5.493	ug/L	111.42	70.0	130.0

**Ordered Parameter Results**

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>MRL</u>	<u>Units</u>
34256-82-1	Acetochlor	<	0.1	ug/L
15972-60-8	Alachlor	<	0.1	ug/L
1912-24-9	Atrazine	<	0.1	ug/L
314-40-9	Bromacil	<	0.1	ug/L
21725-46-2	Cyanazine	<	0.1	ug/L
333-41-5	Diazinon	<	0.1	ug/L
959-98-8	Endosulfan I	<	0.1	ug/L
33213-65-9	Endosulfan II	<	0.1	ug/L
1031-07-8	Endosulfan sulfate	<	0.1	ug/L
22224-92-6	Fenamiphos	<	0.1	ug/L
51218-45-2	Metolachlor	<	0.1	ug/L
21087-64-9	Metribuzin	<	0.1	ug/L
40487-42-1	Pendimethalin	<	0.1	ug/L
1610-18-0	Prometon	<	0.1	ug/L
1918-16-7	Propachlor	<	0.1	ug/L
122-34-9	Simazine	<	0.07	ug/L
13071-79-9	Terbufos	<	0.1	ug/L
1582-09-8	Trifluralin	<	0.1	ug/L

**Environmental Health Laboratories  
Laboratory Fortified Blank Check**

**File Name:** FB-525A  
**Acquisition File:** A021099A  
**Data Directory:** 021099A  
**Today's Date:** 1999/08/10  
**Instrument:** GC/MS - AE  
**Extracted Date:** 1999/02/05  
**Sample Number:** 387538

**Method:** 525.2  
**Calibration File:** 0928F0AE  
**Analysis Date:** 1999/02/10  
**Analysis Time:** 18:39  
**Analyst:** toms  
**Results Submitted By:** toms  
**Run Number:** 17122

**Sample Description:** LFB A L

**Sample Quality Control**

<u>CAS No.</u>	<u>Parameter</u>	Limits				
		<u>Amount</u>	<u>Units</u>	<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>
877-09-8	SS-2,4,5,6-Tetrachloro-m-xylene	5.239	ug/L	106.27	70.0	130.0
2050-68-2	SS-4,4'-Dichlorobiphenyl	5.824	ug/L	118.13	70.0	130.0
82-68-8	SS-Pentachloronitrobenzene	5.685	ug/L	115.31	70.0	130.0
N/A	IS-Pyrene-d10	5.0	ug/L	85.38	70.0	130.0
115-86-6	SS-Triphenylphosphate	5.816	ug/L	117.97	70.0	130.0

**Ordered Parameter Results**

<u>CAS No.</u>	<u>Parameter</u>	Limits						
		<u>Target</u>	<u>Amount</u>	<u>Units</u>	<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>	
34256-82-1	Acetochlor	1.0	1.001	ug/L	100.1	70.0	130.0	PASS
15972-60-8	Alachlor	1.0	0.881	ug/L	88.1	70.0	130.0	PASS
1912-24-9	Atrazine	1.0	1.079	ug/L	107.9	70.0	130.0	PASS
314-40-9	Bromacil	1.0	0.716	ug/L	71.6	70.0	130.0	PASS
21725-46-2	Cyanazine	1.0	0.855	ug/L	85.5	70.0	130.0	PASS
333-41-5	Diazinon	1.0	1.135	ug/L	113.5	70.0	130.0	PASS
959-98-8	Endosulfan I	1.0	0.924	ug/L	92.4	70.0	130.0	PASS
33213-65-9	Endosulfan II	1.0	0.945	ug/L	94.5	70.0	130.0	PASS
1031-07-8	Endosulfan sulfate	1.0	0.92	ug/L	92.0	70.0	130.0	PASS
22224-92-6	Fenamiphos	1.0	0.713	ug/L	71.3	70.0	130.0	PASS
51218-45-2	Metolachlor	1.0	0.907	ug/L	90.7	70.0	130.0	PASS
21087-64-9	Metribuzin	1.0	0.681	ug/L	68.1	70.0	130.0	*FAIL*
40487-42-1	Pendimethalin	1.0	0.824	ug/L	82.4	70.0	130.0	PASS
1610-18-0	Prometon	1.0	0.921	ug/L	92.1	70.0	130.0	PASS
1918-16-7	Propachlor	1.0	0.975	ug/L	97.5	70.0	130.0	PASS
122-34-9	Simazine	1.0	0.734	ug/L	73.4	70.0	130.0	PASS
13071-79-9	Terbufos	1.0	0.807	ug/L	80.7	70.0	130.0	PASS
1582-09-8	Trifluralin	1.0	0.691	ug/L	69.1	70.0	130.0	*FAIL*

**Environmental Health Laboratories**  
**Sample Result Record Sheet**

**File Name:** 386258  
**Acquisition File:** A021099A  
**Data Directory:** 021099A  
**Instrument:** GC/MS - AE  
**Extracted Date:** 1999/02/05  
**Sample Number:** 386258  
**Sample Location:** Not Available  
**Sample Description:** IDEM DK12471 L

**Method:** 525.2  
**Calibration File:** 0928F0AE  
**Analysis Date:** 1999/02/10  
**Analysis Time:** 19:13  
**Analyst:** toms  
**Results Submitted By:** toms  
**Run Number:** 17122

**Sample Quality Control**

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>Units</u>	Limits		
				<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>
877-09-8	SS-2,4,5,6-Tetrachloro-m-xylene	5.569	ug/L	112.73	70.0	130.0
2050-68-2	SS-4,4'-Dichlorobiphenyl	5.061	ug/L	102.45	70.0	130.0
82-68-8	SS-Pentachloronitrobenzene	5.664	ug/L	114.66	70.0	130.0
N/A	IS-Pyrene-d10	5.0	ug/L	107.13	70.0	130.0
115-86-6	SS-Triphenylphosphate	5.543	ug/L	112.21	70.0	130.0

**Ordered Parameter Results**

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>MRL</u>	<u>Units</u>
34256-82-1	Acetochlor	<	0.1	ug/L
15972-60-8	Alachlor	<	0.1	ug/L
1912-24-9	Atrazine	<	0.1	ug/L
314-40-9	Bromacil	<	0.1	ug/L
21725-46-2	Cyanazine	<	0.1	ug/L
333-41-5	Diazinon	<	0.1	ug/L
959-98-8	Endosulfan I	<	0.1	ug/L
33213-65-9	Endosulfan II	<	0.1	ug/L
1031-07-8	Endosulfan sulfate	<	0.1	ug/L
22224-92-6	Fenamiphos	<	0.1	ug/L
51218-45-2	Metolachlor	<	0.1	ug/L
21087-64-9	Metribuzin	<	0.1	ug/L
40487-42-1	Pendimethalin	<	0.1	ug/L
1610-18-0	Prometon	<	0.1	ug/L
1918-16-7	Propachlor	<	0.1	ug/L
122-34-9	Simazine	<	0.07	ug/L
13071-79-9	Terbufos	<	0.1	ug/L
1582-09-8	Trifluralin	<	0.1	ug/L

**Environmental Health Laboratories**  
**Sample Result Record Sheet**

**File Name:** 386263  
**Acquisition File:** A021099A  
**Data Directory:** 021099A  
**Instrument:** GC/MS - AE  
**Extracted Date:** 1999/02/05  
**Sample Number:** 386263  
**Sample Location:** Not Available  
**Sample Description:** IDEM DK12472 L

**Method:** 525.2  
**Calibration File:** 0928F0AE  
**Analysis Date:** 1999/02/10  
**Analysis Time:** 19:48  
**Analyst:** toms  
**Results Submitted By:** toms  
**Run Number:** 17122

**Sample Quality Control**

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>Units</u>	Limits		
				<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>
877-09-8	SS-2,4,5,6-Tetrachloro-m-xylene	5.167	ug/L	105.66	70.0	130.0
2050-68-2	SS-4,4'-Dichlorobiphenyl	5.012	ug/L	102.49	70.0	130.0
82-68-8	SS-Pentachloronitrobenzene	5.221	ug/L	106.77	70.0	130.0
N/A	IS-Pyrene-d10	5.0	ug/L	96.78	70.0	130.0
115-86-6	SS-Triphenylphosphate	5.562	ug/L	113.74	70.0	130.0

**Ordered Parameter Results**

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>MRL</u>	<u>Units</u>
34256-82-1	Acetochlor	<	0.1	ug/L
15972-60-8	Alachlor	<	0.1	ug/L
1912-24-9	Atrazine	<	0.1	ug/L
314-40-9	Bromacil	<	0.1	ug/L
21725-46-2	Cyanazine	<	0.1	ug/L
333-41-5	Diazinon	<	0.1	ug/L
959-98-8	Endosulfan I	<	0.1	ug/L
33213-65-9	Endosulfan II	<	0.1	ug/L
1031-07-8	Endosulfan sulfate	<	0.1	ug/L
22224-92-6	Fenamiphos	<	0.1	ug/L
51218-45-2	Metolachlor	<	0.1	ug/L
21087-64-9	Metribuzin	<	0.1	ug/L
40487-42-1	Pendimethalin	<	0.1	ug/L
1610-18-0	Prometon	<	0.1	ug/L
1918-16-7	Propachlor	<	0.1	ug/L
122-34-9	Simazine	<	0.07	ug/L
13071-79-9	Terbufos	<	0.1	ug/L
1582-09-8	Trifluralin	<	0.1	ug/L

**Environmental Health Laboratories**  
**Sample Result Record Sheet**

**File Name:** 386268  
**Acquisition File:** A021099A  
**Data Directory:** 021099A  
**Instrument:** GC/MS - AE  
**Extracted Date:** 1999/02/05  
**Sample Number:** 386268  
**Sample Location:** Not Available  
**Sample Description:** IDEM DK12473 L

**Method:** 525.2  
**Calibration File:** 0928F0AE  
**Analysis Date:** 1999/02/10  
**Analysis Time:** 20:22  
**Analyst:** toms  
**Results Submitted By:** toms  
**Run Number:** 17122

**Sample Quality Control**

<u>CAS No.</u>	<u>Parameter</u>	Limits				
		<u>Amount</u>	<u>Units</u>	<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>
877-09-8	SS-2,4,5,6-Tetrachloro-m-xylene	5.598	ug/L	114.01	70.0	130.0
2050-68-2	SS-4,4'-Dichlorobiphenyl	5.073	ug/L	103.32	70.0	130.0
82-68-8	SS-Pentachloronitrobenzene	5.582	ug/L	113.69	70.0	130.0
N/A	IS-Pyrene-d10	5.0	ug/L	86.23	70.0	130.0
115-86-6	SS-Triphenylphosphate	5.309	ug/L	108.13	70.0	130.0

**Ordered Parameter Results**

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>MRL</u>	<u>Units</u>
34256-82-1	Acetochlor	<	0.1	ug/L
15972-60-8	Alachlor	<	0.1	ug/L
1912-24-9	Atrazine	<	0.1	ug/L
314-40-9	Bromacil	<	0.1	ug/L
21725-46-2	Cyanazine	<	0.1	ug/L
333-41-5	Diazinon	<	0.1	ug/L
959-98-8	Endosulfan I	<	0.1	ug/L
33213-65-9	Endosulfan II	<	0.1	ug/L
1031-07-8	Endosulfan sulfate	<	0.1	ug/L
22224-92-6	Fenamiphos	<	0.1	ug/L
51218-45-2	Metolachlor	<	0.1	ug/L
21087-64-9	Metribuzin	<	0.1	ug/L
40487-42-1	Pendimethalin	<	0.1	ug/L
1610-18-0	Prometon	<	0.1	ug/L
1918-16-7	Propachlor	<	0.1	ug/L
122-34-9	Simazine	<	0.07	ug/L
13071-79-9	Terbufos	<	0.1	ug/L
1582-09-8	Trifluralin	<	0.1	ug/L

**Environmental Health Laboratories**  
**Sample Result Record Sheet**

**File Name:** 386273  
**Acquisition File:** A021099A  
**Data Directory:** 021099A  
**Instrument:** GC/MS - AE  
**Extracted Date:** 1999/02/05  
**Sample Number:** 386273  
**Sample Location:** Not Available  
**Sample Description:** IDEM DK12474 L

**Method:** 525.2  
**Calibration File:** 0928F0AE  
**Analysis Date:** 1999/02/10  
**Analysis Time:** 20:57  
**Analyst:** toms  
**Results Submitted By:** toms  
**Run Number:** 17122

**Sample Quality Control**

<u>CAS No.</u>	<u>Parameter</u>	Limits				
		<u>Amount</u>	<u>Units</u>	<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>
877-09-8	SS-2,4,5,6-Tetrachloro-m-xylene	5.254	ug/L	106.36	70.0	130.0
2050-68-2	SS-4,4'-Dichlorobiphenyl	4.842	ug/L	98.02	70.0	130.0
82-68-8	SS-Pentachloronitrobenzene	5.149	ug/L	104.23	70.0	130.0
N/A	IS-Pyrene-d10	5.0	ug/L	91.80	70.0	130.0
115-86-6	SS-Triphenylphosphate	5.506	ug/L	111.46	70.0	130.0

**Ordered Parameter Results**

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>MRL</u>	<u>Units</u>
34256-82-1	Acetochlor	<	0.1	ug/L
15972-60-8	Alachlor	<	0.1	ug/L
1912-24-9	Atrazine	<	0.1	ug/L
314-40-9	Bromacil	<	0.1	ug/L
21725-46-2	Cyanazine	<	0.1	ug/L
333-41-5	Diazinon	<	0.1	ug/L
959-98-8	Endosulfan I	<	0.1	ug/L
33213-65-9	Endosulfan II	<	0.1	ug/L
1031-07-8	Endosulfan sulfate	<	0.1	ug/L
22224-92-6	Fenamiphos	<	0.1	ug/L
51218-45-2	Metolachlor	<	0.1	ug/L
21087-64-9	Metribuzin	<	0.1	ug/L
40487-42-1	Pendimethalin	<	0.1	ug/L
1610-18-0	Prometon	<	0.1	ug/L
1918-16-7	Propachlor	<	0.1	ug/L
122-34-9	Simazine	<	0.07	ug/L
13071-79-9	Terbufos	<	0.1	ug/L
1582-09-8	Trifluralin	<	0.1	ug/L

**Environmental Health Laboratories**  
**Sample Result Record Sheet**

**File Name:** 386278  
**Acquisition File:** A021099A  
**Data Directory:** 021099A  
**Instrument:** GC/MS - AE  
**Extracted Date:** 1999/02/05  
**Sample Number:** 386278  
**Sample Location:** Not Available  
**Sample Description:** IDEM DK12475 L

**Method:** 525.2  
**Calibration File:** 0928F0AE  
**Analysis Date:** 1999/02/10  
**Analysis Time:** 21:31  
**Analyst:** toms  
**Results Submitted By:** toms  
**Run Number:** 17122

**Sample Quality Control**

<u>CAS No.</u>	<u>Parameter</u>	Limits				
		<u>Amount</u>	<u>Units</u>	<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>
877-09-8	SS-2,4,5,6-Tetrachloro-m-xylene	4.499	ug/L	92.38	70.0	130.0
2050-68-2	SS-4,4'-Dichlorobiphenyl	4.402	ug/L	90.39	70.0	130.0
82-68-8	SS-Pentachloronitrobenzene	4.672	ug/L	95.93	70.0	130.0
N/A	IS-Pyrene-d10	5.0	ug/L	83.92	70.0	130.0
115-86-6	SS-Triphenylphosphate	4.831	ug/L	99.20	70.0	130.0

**Ordered Parameter Results**

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>MRL</u>	<u>Units</u>
34256-82-1	Acetochlor	<	0.1	ug/L
15972-60-8	Alachlor	<	0.1	ug/L
1912-24-9	Atrazine	<	0.1	ug/L
314-40-9	Bromacil	<	0.1	ug/L
21725-46-2	Cyanazine	<	0.1	ug/L
333-41-5	Diazinon	<	0.1	ug/L
959-98-8	Endosulfan I	<	0.1	ug/L
33213-65-9	Endosulfan II	<	0.1	ug/L
1031-07-8	Endosulfan sulfate	<	0.1	ug/L
22224-92-6	Fenamiphos	<	0.1	ug/L
51218-45-2	Metolachlor	<	0.1	ug/L
21087-64-9	Metribuzin	<	0.1	ug/L
40487-42-1	Pendimethalin	<	0.1	ug/L
1610-18-0	Prometon	<	0.1	ug/L
1918-16-7	Propachlor	<	0.1	ug/L
122-34-9	Simazine	<	0.07	ug/L
13071-79-9	Terbufos	<	0.1	ug/L
1582-09-8	Trifluralin	<	0.1	ug/L

**Environmental Health Laboratories**  
**Sample Result Record Sheet**

**File Name:** 386283  
**Acquisition File:** A021099A  
**Data Directory:** 021099A  
**Instrument:** GC/MS - AE  
**Extracted Date:** 1999/02/05  
**Sample Number:** 386283  
**Sample Location:** Not Available  
**Sample Description:** IDEM DK12476 L

**Method:** 525.2  
**Calibration File:** 0928F0AE  
**Analysis Date:** 1999/02/10  
**Analysis Time:** 22:06  
**Analyst:** toms  
**Results Submitted By:** toms  
**Run Number:** 17122

**Sample Quality Control**

<u>CAS No.</u>	<u>Parameter</u>	Limits				
		<u>Amount</u>	<u>Units</u>	<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>
877-09-8	SS-2,4,5,6-Tetrachloro-m-xylene	5.11	ug/L	103.34	70.0	130.0
2050-68-2	SS-4,4'-Dichlorobiphenyl	4.77	ug/L	96.46	70.0	130.0
82-68-8	SS-Pentachloronitrobenzene	5.104	ug/L	103.22	70.0	130.0
N/A	IS-Pyrene-d10	5.0	ug/L	96.45	70.0	130.0
115-86-6	SS-Triphenylphosphate	5.434	ug/L	109.89	70.0	130.0

**Ordered Parameter Results**

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>MRL</u>	<u>Units</u>
34256-82-1	Acetochlor	<	0.1	ug/L
15972-60-8	Alachlor	<	0.1	ug/L
1912-24-9	Atrazine	<	0.1	ug/L
314-40-9	Bromacil	<	0.1	ug/L
21725-46-2	Cyanazine	<	0.1	ug/L
333-41-5	Diazinon	<	0.1	ug/L
959-98-8	Endosulfan I	<	0.1	ug/L
33213-65-9	Endosulfan II	<	0.1	ug/L
1031-07-8	Endosulfan sulfate	<	0.1	ug/L
22224-92-6	Fenamiphos	<	0.1	ug/L
51218-45-2	Metolachlor	<	0.1	ug/L
21087-64-9	Metribuzin	<	0.1	ug/L
40487-42-1	Pendimethalin	<	0.1	ug/L
1610-18-0	Prometon	<	0.1	ug/L
1918-16-7	Propachlor	<	0.1	ug/L
122-34-9	Simazine	<	0.07	ug/L
13071-79-9	Terbufos	<	0.1	ug/L
1582-09-8	Trifluralin	<	0.1	ug/L

**Environmental Health Laboratories**  
**Sample Result Record Sheet**

**File Name:** 386288  
**Acquisition File:** A021099A  
**Data Directory:** 021099A  
**Instrument:** GC/MS - AE  
**Extracted Date:** 1999/02/05  
**Sample Number:** 386288  
**Sample Location:** Not Available  
**Sample Description:** IDEM DK12477 L

**Method:** 525.2  
**Calibration File:** 0928F0AE  
**Analysis Date:** 1999/02/10  
**Analysis Time:** 22:40  
**Analyst:** toms  
**Results Submitted By:** toms  
**Run Number:** 17122

**Sample Quality Control**

<u>CAS No.</u>	<u>Parameter</u>	Limits				
		<u>Amount</u>	<u>Units</u>	<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>
877-09-8	SS-2,4,5,6-Tetrachloro-m-xylene	5.088	ug/L	102.79	70.0	130.0
2050-68-2	SS-4,4'-Dichlorobiphenyl	4.919	ug/L	99.37	70.0	130.0
82-68-8	SS-Pentachloronitrobenzene	5.078	ug/L	102.59	70.0	130.0
N/A	IS-Pyrene-d10	5.0	ug/L	96.59	70.0	130.0
115-86-6	SS-Triphenylphosphate	5.348	ug/L	108.04	70.0	130.0

**Ordered Parameter Results**

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>MRL</u>	<u>Units</u>
34256-82-1	Acetochlor	<	0.1	ug/L
15972-60-8	Alachlor	<	0.1	ug/L
1912-24-9	Atrazine	<	0.1	ug/L
314-40-9	Bromacil	<	0.1	ug/L
21725-46-2	Cyanazine	<	0.1	ug/L
333-41-5	Diazinon	<	0.1	ug/L
959-98-8	Endosulfan I	<	0.1	ug/L
33213-65-9	Endosulfan II	<	0.1	ug/L
1031-07-8	Endosulfan sulfate	<	0.1	ug/L
22224-92-6	Fenamiphos	<	0.1	ug/L
51218-45-2	Metolachlor	<	0.1	ug/L
21087-64-9	Metribuzin	<	0.1	ug/L
40487-42-1	Pendimethalin	<	0.1	ug/L
1610-18-0	Prometon	<	0.1	ug/L
1918-16-7	Propachlor	<	0.1	ug/L
122-34-9	Simazine	<	0.07	ug/L
13071-79-9	Terbufos	<	0.1	ug/L
1582-09-8	Trifluralin	<	0.1	ug/L

**Environmental Health Laboratories**  
**Sample Result Record Sheet**

**File Name:** 386293  
**Acquisition File:** A021099A  
**Data Directory:** 021099A  
**Instrument:** GC/MS - AE  
**Extracted Date:** 1999/02/05  
**Sample Number:** 386293  
**Sample Location:** Not Available  
**Sample Description:** IDEM DK12478 L

**Method:** 525.2  
**Calibration File:** 0928FOAE  
**Analysis Date:** 1999/02/10  
**Analysis Time:** 23:15  
**Analyst:** toms  
**Results Submitted By:** toms  
**Run Number:** 17122

**Sample Quality Control**

<u>CAS No.</u>	<u>Parameter</u>	Limits				
		<u>Amount</u>	<u>Units</u>	<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>
877-09-8	SS-2,4,5,6-Tetrachloro-m-xylene	4.878	ug/L	100.47	70.0	130.0
2050-68-2	SS-4,4'-Dichlorobiphenyl	4.791	ug/L	98.68	70.0	130.0
82-68-8	SS-Pentachloronitrobenzene	5.084	ug/L	104.72	70.0	130.0
N/A	IS-Pyrene-d10	5.0	ug/L	112.46	70.0	130.0
115-86-6	SS-Triphenylphosphate	5.211	ug/L	107.33	70.0	130.0

**Ordered Parameter Results**

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>MRL</u>	<u>Units</u>
34256-82-1	Acetochlor	<	0.1	ug/L
15972-60-8	Alachlor	<	0.1	ug/L
1912-24-9	Atrazine	<	0.1	ug/L
314-40-9	Bromacil	<	0.1	ug/L
21725-46-2	Cyanazine	<	0.1	ug/L
333-41-5	Diazinon	<	0.1	ug/L
959-98-8	Endosulfan I	<	0.1	ug/L
33213-65-9	Endosulfan II	<	0.1	ug/L
1031-07-8	Endosulfan sulfate	<	0.1	ug/L
22224-92-6	Fenamiphos	<	0.1	ug/L
51218-45-2	Metolachlor	<	0.1	ug/L
21087-64-9	Metribuzin	<	0.1	ug/L
40487-42-1	Pendimethalin	<	0.1	ug/L
1610-18-0	Prometon	<	0.1	ug/L
1918-16-7	Propachlor	<	0.1	ug/L
122-34-9	Simazine	<	0.07	ug/L
13071-79-9	Terbufos	<	0.1	ug/L
1582-09-8	Trifluralin	<	0.1	ug/L

**Environmental Health Laboratories**  
**Sample Result Record Sheet**

**File Name:** 386298  
**Acquisition File:** A021099A  
**Data Directory:** 021099A  
**Instrument:** GC/MS - AE  
**Extracted Date:** 1999/02/05  
**Sample Number:** 386298  
**Sample Location:** Not Available  
**Sample Description:** IDEM DK12373 L

**Method:** 525.2  
**Calibration File:** 0928F0AE  
**Analysis Date:** 1999/02/10  
**Analysis Time:** 23:49  
**Analyst:** toms  
**Results Submitted By:** toms  
**Run Number:** 17122

**Sample Quality Control**

<u>CAS No.</u>	<u>Parameter</u>	Limits				
		<u>Amount</u>	<u>Units</u>	<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>
877-09-8	SS-2,4,5,6-Tetrachloro-m-xylene	5.456	ug/L	111.69	70.0	130.0
2050-68-2	SS-4,4'-Dichlorobiphenyl	5.437	ug/L	111.30	70.0	130.0
82-68-8	SS-Pentachloronitrobenzene	5.949	ug/L	121.78	70.0	130.0
N/A	IS-Pyrene-d10	5.0	ug/L	92.36	70.0	130.0
115-86-6	SS-Triphenylphosphate	5.848	ug/L	119.71	70.0	130.0

**Ordered Parameter Results**

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>MRL</u>	<u>Units</u>
34256-82-1	Acetochlor	<	0.1	ug/L
15972-60-8	Alachlor	<	0.1	ug/L
1912-24-9	Atrazine	<	0.1	ug/L
314-40-9	Bromacil	<	0.1	ug/L
21725-46-2	Cyanazine	<	0.1	ug/L
333-41-5	Diazinon	<	0.1	ug/L
959-98-8	Endosulfan I	<	0.1	ug/L
33213-65-9	Endosulfan II	<	0.1	ug/L
1031-07-8	Endosulfan sulfate	<	0.1	ug/L
22224-92-6	Fenamiphos	<	0.1	ug/L
51218-45-2	Metolachlor	<	0.1	ug/L
21087-64-9	Metribuzin	<	0.1	ug/L
40487-42-1	Pendimethalin	<	0.1	ug/L
1610-18-0	Prometon	<	0.1	ug/L
1918-16-7	Propachlor	<	0.1	ug/L
122-34-9	Simazine	<	0.07	ug/L
13071-79-9	Terbufos	<	0.1	ug/L
1582-09-8	Trifluralin	<	0.1	ug/L

**Environmental Health Laboratories**  
**Sample Result Record Sheet**

**File Name:** 386313  
**Acquisition File:** A021099A  
**Data Directory:** 021099A  
**Instrument:** GC/MS - AE  
**Extracted Date:** 1999/02/05  
**Sample Number:** 386313  
**Sample Location:** Not Available  
**Sample Description:** IDEM DK12479 L

**Method:** 525.2  
**Calibration File:** 0928F0AE  
**Analysis Date:** 1999/02/11  
**Analysis Time:** 00:24  
**Analyst:** toms  
**Results Submitted By:** toms  
**Run Number:** 17122

**Sample Quality Control**

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>Units</u>	Limits		
				<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>
877-09-8	SS-2,4,5,6-Tetrachloro-m-xylene	5.558	ug/L	113.89	70.0	130.0
2050-68-2	SS-4,4'-Dichlorobiphenyl	5.157	ug/L	105.68	70.0	130.0
82-68-8	SS-Pentachloronitrobenzene	5.294	ug/L	108.48	70.0	130.0
N/A	IS-Pyrene-d10	5.0	ug/L	98.93	70.0	130.0
115-86-6	SS-Triphenylphosphate	5.409	ug/L	110.84	70.0	130.0

**Ordered Parameter Results**

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>MRL</u>	<u>Units</u>
34256-82-1	Acetochlor	<	0.1	ug/L
15972-60-8	Alachlor	<	0.1	ug/L
1912-24-9	Atrazine	<	0.1	ug/L
314-40-9	Bromacil	<	0.1	ug/L
21725-46-2	Cyanazine	<	0.1	ug/L
333-41-5	Diazinon	<	0.1	ug/L
959-98-8	Endosulfan I	<	0.1	ug/L
33213-65-9	Endosulfan II	<	0.1	ug/L
1031-07-8	Endosulfan sulfate	<	0.1	ug/L
22224-92-6	Fenamiphos	<	0.1	ug/L
51218-45-2	Metolachlor	<	0.1	ug/L
21087-64-9	Metribuzin	<	0.1	ug/L
40487-42-1	Pendimethalin	<	0.1	ug/L
1610-18-0	Prometon	<	0.1	ug/L
1918-16-7	Propachlor	<	0.1	ug/L
122-34-9	Simazine	<	0.07	ug/L
13071-79-9	Terbufos	<	0.1	ug/L
1582-09-8	Trifluralin	<	0.1	ug/L

**Environmental Health Laboratories**  
**Sample Result Record Sheet**

<b>File Name:</b> 386318	<b>Method:</b> 525.2
<b>Acquisition File:</b> A021099A	<b>Calibration File:</b> 0928F0AE
<b>Data Directory:</b> 021099A	<b>Analysis Date:</b> 1999/02/11
<b>Instrument:</b> GC/MS - AE	<b>Analysis Time:</b> 00:58
<b>Extracted Date:</b> 1999/02/05	<b>Analyst:</b> toms
<b>Sample Number:</b> 386318	<b>Results Submitted By:</b> toms
<b>Sample Location:</b> Not Available	<b>Run Number:</b> 17122
<b>Sample Description:</b> IDEM DK12480 L	

**Sample Quality Control**

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>Units</u>	Limits		
				<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>
877-09-8	SS-2,4,5,6-Tetrachloro-m-xylene	5.318	ug/L	109.09	70.0	130.0
2050-68-2	SS-4,4'-Dichlorobiphenyl	4.882	ug/L	100.14	70.0	130.0
82-68-8	SS-Pentachloronitrobenzene	5.244	ug/L	107.57	70.0	130.0
N/A	IS-Pyrene-d10	5.0	ug/L	113.15	70.0	130.0
115-86-6	SS-Triphenylphosphate	4.928	ug/L	101.09	70.0	130.0

**Ordered Parameter Results**

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>MRL</u>	<u>Units</u>
34256-82-1	Acetochlor	<	0.1	ug/L
15972-60-8	Alachlor	<	0.1	ug/L
1912-24-9	Atrazine	<	0.1	ug/L
314-40-9	Bromacil	<	0.1	ug/L
21725-46-2	Cyanazine	<	0.1	ug/L
333-41-5	Diazinon	<	0.1	ug/L
959-98-8	Endosulfan I	<	0.1	ug/L
33213-65-9	Endosulfan II	<	0.1	ug/L
1031-07-8	Endosulfan sulfate	<	0.1	ug/L
22224-92-6	Fenamiphos	<	0.1	ug/L
51218-45-2	Metolachlor	<	0.1	ug/L
21087-64-9	Metribuzin	<	0.1	ug/L
40487-42-1	Pendimethalin	<	0.1	ug/L
1610-18-0	Prometon	<	0.1	ug/L
1918-16-7	Propachlor	<	0.1	ug/L
122-34-9	Simazine	<	0.07	ug/L
13071-79-9	Terbufos	<	0.1	ug/L
1582-09-8	Trifluralin	<	0.1	ug/L

**Environmental Health Laboratories**  
**Sample Result Record Sheet**

**File Name:** 386323  
**Acquisition File:** A021099A  
**Data Directory:** 021099A  
**Instrument:** GC/MS - AE  
**Extracted Date:** 1999/02/05  
**Sample Number:** 386323  
**Sample Location:** Not Available  
**Sample Description:** IDEM DK12481 L

**Method:** 525.2  
**Calibration File:** 0928F0AE  
**Analysis Date:** 1999/02/11  
**Analysis Time:** 01:33  
**Analyst:** toms  
**Results Submitted By:** toms  
**Run Number:** 17122

**Sample Quality Control**

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>Units</u>	Limits		
				<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>
877-09-8	SS-2,4,5,6-Tetrachloro-m-xylene	5.709	ug/L	116.27	70.0	130.0
2050-68-2	SS-4,4'-Dichlorobiphenyl	4.916	ug/L	100.12	70.0	130.0
82-68-8	SS-Pentachloronitrobenzene	5.516	ug/L	112.34	70.0	130.0
N/A	IS-Pyrene-d10	5.0	ug/L	108.52	70.0	130.0
115-86-6	SS-Triphenylphosphate	4.422	ug/L	90.06	70.0	130.0

**Ordered Parameter Results**

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>MRL</u>	<u>Units</u>
34256-82-1	Acetochlor	<	0.1	ug/L
15972-60-8	Alachlor	<	0.1	ug/L
1912-24-9	Atrazine	<	0.1	ug/L
314-40-9	Bromacil	<	0.1	ug/L
21725-46-2	Cyanazine	<	0.1	ug/L
333-41-5	Diazinon	<	0.1	ug/L
959-98-8	Endosulfan I	<	0.1	ug/L
33213-65-9	Endosulfan II	<	0.1	ug/L
1031-07-8	Endosulfan sulfate	<	0.1	ug/L
22224-92-6	Fenamiphos	<	0.1	ug/L
51218-45-2	Metolachlor	<	0.1	ug/L
21087-64-9	Metribuzin	<	0.1	ug/L
40487-42-1	Pendimethalin	<	0.1	ug/L
1610-18-0	Prometon	<	0.1	ug/L
1918-16-7	Propachlor	<	0.1	ug/L
122-34-9	Simazine	<	0.07	ug/L
13071-79-9	Terbufos	<	0.1	ug/L
1582-09-8	Trifluralin	<	0.1	ug/L

**Environmental Health Laboratories**  
**Sample Result Record Sheet**

**File Name:** 386328  
**Acquisition File:** A021099A  
**Data Directory:** 021099A  
**Instrument:** GC/MS - AE  
**Extracted Date:** 1999/02/05  
**Sample Number:** 386328  
**Sample Location:** Not Available  
**Sample Description:** IDEM DK12329 L

**Method:** 525.2  
**Calibration File:** 0928F0AE  
**Analysis Date:** 1999/02/11  
**Analysis Time:** 02:08  
**Analyst:** toms  
**Results Submitted By:** toms  
**Run Number:** 17122

**Sample Quality Control**

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>Units</u>	Limits		
				<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>
877-09-8	SS-2,4,5,6-Tetrachloro-m-xylene	5.055	ug/L	104.44	70.0	130.0
2050-68-2	SS-4,4'-Dichlorobiphenyl	4.271	ug/L	88.24	70.0	130.0
82-68-8	SS-Pentachloronitrobenzene	4.702	ug/L	97.15	70.0	130.0
N/A	IS-Pyrene-d10	5.0	ug/L	111.78	70.0	130.0
115-86-6	SS-Triphenylphosphate	3.525	ug/L	72.83	70.0	130.0

**Ordered Parameter Results**

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>MRL</u>	<u>Units</u>
34256-82-1	Acetochlor	<	0.1	ug/L
15972-60-8	Alachlor	<	0.1	ug/L
1912-24-9	Atrazine	<	0.1	ug/L
314-40-9	Bromacil	<	0.1	ug/L
21725-46-2	Cyanazine	<	0.1	ug/L
333-41-5	Diazinon	<	0.1	ug/L
959-98-8	Endosulfan I	<	0.1	ug/L
33213-65-9	Endosulfan II	<	0.1	ug/L
1031-07-8	Endosulfan sulfate	<	0.1	ug/L
22224-92-6	Fenamiphos	<	0.1	ug/L
51218-45-2	Metolachlor	<	0.1	ug/L
21087-64-9	Metribuzin	<	0.1	ug/L
40487-42-1	Pendimethalin	<	0.1	ug/L
1610-18-0	Prometon	<	0.1	ug/L
1918-16-7	Propachlor	<	0.1	ug/L
122-34-9	Simazine	<	0.07	ug/L
13071-79-9	Terbufos	<	0.1	ug/L
1582-09-8	Trifluralin	<	0.1	ug/L

**PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED  
MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY**

Lab Name: Environmental Health Laboratories  
 Contract: BAA 97-044  
 Project: IDEM / Pesticide Monitoring Network  
 Column: Restek XTL-5 30m x 0.25mm ID  
 Sample Number/Description: 386328 / IDEM DK12329

Lab ID: na  
 Task: 4A  
 Case: na  
 Method: 525.2  
 Matrix: GW  
 Acc. File: A021099A  
 Data Directory: 021099A  
 Initial Cali File: 0928F0AE  
 Instrument ID: GC/MS - AE  
 MS Data File: 386329-S  
 MSD Data File: 386330SD

Compound	Spike Added	Sample Conc	MS Conc	MS % Rec	% Recovery Limits Q	MSD Conc	MSD % Rec	% Recovery Limits Q	RPD RPD	RPD Limits Q	
Acetochlor	1.0	NF	0.949	94.9	70 - 130	1.008	100.8	70 - 130	6.0	20%	
Alachlor	1.0	NF	0.838	83.8	70 - 130	0.922	92.2	70 - 130	9.5	20%	
Atrazine	1.0	NF	0.960	96.0	70 - 130	1.089	108.9	70 - 130	12.6	20%	
Bromacil	1.0	NF	0.812	81.2	70 - 130	0.870	87.0	70 - 130	6.9	20%	
Cyanazine	1.0	NF	0.793	79.3	70 - 130	0.828	82.8	70 - 130	4.3	20%	
Diazinon	1.0	NF	1.050	105.0	70 - 130	1.132	113.2	70 - 130	7.5	20%	
Endosulfan I	1.0	NF	0.906	90.6	70 - 130	1.206	120.6	70 - 130	28.4	20% *	
Endosulfan II	1.0	NF	0.934	93.4	70 - 130	1.125	112.5	70 - 130	18.6	20%	
Endosulfan sulfate	1.0	NF	0.822	82.2	70 - 130	1.015	101.5	70 - 130	21.0	20% *	
Fenamiphos	1.0	NF	0.709	70.9	70 - 130	0.890	89.0	70 - 130	22.6	20% *	
Metolachlor	1.0	NF	0.877	87.7	70 - 130	0.961	96.1	70 - 130	9.1	20%	
Metrubuzin	1.0	NF	0.755	75.5	70 - 130	0.745	74.5	70 - 130	1.3	20%	
Pendimethalin	1.0	NF	1.027	102.7	70 - 130	1.181	118.1	70 - 130	13.9	-20%	
Prometon	1.0	NF	0.977	97.7	70 - 130	1.177	117.7	70 - 130	18.6	20%	
Propachlor	1.0	NF	0.907	90.7	70 - 130	1.038	103.8	70 - 130	13.5	20%	
Simazine	1.0	NF	0.655	65.5	70 - 130	*	0.709	70.9	70 - 130	7.9	20%
Terbufos	1.0	NF	0.748	74.8	70 - 130	0.801	80.1	70 - 130	6.8	20%	
Trifluralin	1.0	NF	0.715	71.5	70 - 130	0.800	80.0	70 - 130	11.2	20%	

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

NF = Not Found

% Rec = % Recovery = (MS Conc - Sample Conc) x 100 / Spike Added

RPD = Relative Percent Difference = abs(MS Conc - MSD Conc) x 100 / (MS Conc + MSD Conc) / 2

Comments: \_\_\_\_\_  
 Environmental Health Laboratories

**Environmental Health Laboratories  
Continuing Calibration Check Check**

**File Name:** C-2-18B  
**Acquisition File:** A021099A  
**Data Directory:** 021099A  
**Today's Date:** 1999/08/10  
**Instrument:** GC/MS - AE  
**Extracted Date:** Not Available  
**Sample Number:** 387536

**Method:** 525.2  
**Calibration File:** 0928F0AE  
**Analysis Date:** 1999/02/11  
**Analysis Time:** 05:36  
**Analyst:** toms  
**Results Submitted By:** toms  
**Run Number:** 17122

**Sample Description:** CCC B

**Sample Quality Control**

<u>CAS No.</u>	<u>Parameter</u>	Limits				
		<u>Amount</u>	<u>Units</u>	<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>
N/A	IS-Pyrene-d10	5.0	ug/L	99.71	70.0	130.0

**Ordered Parameter Results**

<u>CAS No.</u>	<u>Parameter</u>	Limits						
		<u>Target</u>	<u>Amount</u>	<u>Units</u>	<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>	<u>Pass/Fail</u>
34256-82-1	Acetochlor	2.0	2.181	ug/L	109.05	70.0	130.0	PASS
15972-60-8	Alachlor	2.0	1.914	ug/L	95.7	70.0	130.0	PASS
1912-24-9	Atrazine	2.0	2.306	ug/L	115.3	70.0	130.0	PASS
314-40-9	Bromacil	2.0	1.522	ug/L	76.1	70.0	130.0	PASS
21725-46-2	Cyanazine	2.0	1.699	ug/L	84.95	70.0	130.0	PASS
333-41-5	Diazinon	2.0	2.313	ug/L	115.65	70.0	130.0	PASS
959-98-8	Endosulfan I	2.0	2.166	ug/L	108.3	70.0	130.0	PASS
33213-65-9	Endosulfan II	2.0	2.225	ug/L	111.25	70.0	130.0	PASS
1031-07-8	Endosulfan sulfate	2.0	2.018	ug/L	100.9	70.0	130.0	PASS
22224-92-6	Fenamiphos	2.0	1.469	ug/L	73.45	70.0	130.0	PASS
51218-45-2	Metolachlor	2.0	1.956	ug/L	97.8	70.0	130.0	PASS
21087-64-9	Metribuzin	2.0	1.907	ug/L	95.35	70.0	130.0	PASS
40487-42-1	Pendimethalin	2.0	2.061	ug/L	103.05	70.0	130.0	PASS
1610-18-0	Prometon	2.0	2.094	ug/L	104.7	70.0	130.0	PASS
1918-16-7	Propachlor	2.0	2.072	ug/L	103.6	70.0	130.0	PASS
122-34-9	Simazine	2.0	1.578	ug/L	78.9	70.0	130.0	PASS
13071-79-9	Terbufos	2.0	1.636	ug/L	81.8	70.0	130.0	PASS
1582-09-8	Trifluralin	2.0	1.679	ug/L	83.95	70.0	130.0	PASS

08/09/99

**Environmental Health Laboratories**  
**Volatile Organic Chemicals**  
**Internal Standard Percent Recovery**

Sample No.	Filename	IS1 Area	IS1 RT	IS1 Area	IS1 RT	IS1 %Rec	Q	Matrix
1. 387537 / LMB	MB-525A	3183448	17.6164	110.97	110.97	RW		
2. 387538 / LFB	FB-525A	2449161	17.6155	85.38	85.38	RW		
3. 386258 / FS	386258	3073125	17.6155	107.13	107.13	GW		
4. 386263 / FS	386263	2776362	17.6164	96.78	96.78	GW		
5. 386268 / FS	386268	2473493	17.6155	86.23	86.23	GW		
6. 386273 / FS	386273	2633451	17.6164	91.80	91.80	GW		
7. 386278 / FS	386278	2407235	17.6174	83.92	83.92	GW		
8. 386283 / FS	386283	2766845	17.6164	96.45	96.45	GW		
9. 386288 / FS	386288	2770669	17.6164	96.59	96.59	GW		
10. 386293 / FS	386293	3226126	17.6164	112.46	112.46	GW		
11. 386298 / FS	386298	2649319	17.6164	92.36	92.36	GW		
12. 386313 / FS	386313	2838058	17.6329	98.93	98.93	GW		
13. 386318 / FS	386318	3245761	17.6329	113.15	113.15	GW		
14. 386323 / FS	386323	3112899	17.632	108.52	108.52	GW		
15. 386328 / FS	386328	3206410	17.632	111.78	111.78	GW		
16. 386329 / MS	386329-S	2917012	17.632	101.69	101.69	GW		
17. 386330 / MSD	386330SD	2657926	17.6329	92.66	92.66	GW		
18. 387536 / CCC	C-2-18B	2860276	17.6485	99.71	99.71	OS		

# Environmental Health Laboratories

## Volatile Organic Chemicals

### Surrogate Percent Recovery

551 = 5S-2,4,5,6-tetrachloro-*m*-xylene

SS2 = SS-4,4'-Dichlorobiphenyl

553 = 55-Pentachloronitrobenzene

**SS4 = SS- Triphenyl**  
**Q = Out of Range**

**PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED  
INITIAL CALIBRATION**

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Acq. File:	A021099A
Contract:	BAA 97-044	Task:	4A	Data Directory:	AE\021099A
Project:	IDEML / Pesticide Monitoring Network	Case:	n/a	Initial Cali File:	0928F0AE
Column:	Restek XTI-5 30m x 0.25mm ID	Method:	525.2	Instrument ID:	GC/MS-AE

<b>Data File / Sample ID:</b>	I005-18A	I-01-18A	I-05-18A	I-1-18A	I-2-18A	I-5-18A	I-10-18A	I-25-18A	I-50-18A	I-100-18A				
<b>Concentration (ug/L):</b>	0.05	0.1	0.5	1	2	5	10	25	50	100	Avg	% RSD	Corr Coeff	Q
<b>Compound</b>	Rf	Rf	Rf	Rf	Rf	Rf	Rf	Rf	Rf	Rf	Rf	Rf	Rf	
Acetochlor	----	0.258	0.254	0.260	0.263	----	0.277	0.285	----	----	0.266	4.6	1.000	
Alachlor	----	1.050	1.083	1.117	1.174	----	1.202	1.183	----	----	1.135	5.4	1.000	
Atrazine	----	0.400	0.407	0.403	0.421	----	0.365	0.297	----	----	0.382	11.9	0.996	
Bromacil	----	0.913	0.746	0.736	0.815	----	0.848	0.862	----	----	0.820	8.4	1.000	
Cyanazine	----	0.308	0.306	0.318	0.343	----	0.349	0.364	----	----	0.331	7.2	1.000	
Diazinon	----	0.914	0.831	0.828	0.857	----	0.808	0.674	----	----	0.819	9.7	0.997	
Endosulfan I	----	0.256	0.209	0.203	0.205	----	0.215	0.205	----	----	0.216	9.4	1.000	
Endosulfan II	----	0.294	0.234	0.230	0.233	----	0.236	0.239	----	----	0.244	10.0	1.000	
Endosulfan sulfate	----	0.210	0.193	0.197	0.201	----	0.204	0.196	----	----	0.200	3.1	1.000	
Fenamiphos	----	0.433	0.487	0.498	0.568	----	0.653	0.624	----	----	0.544	15.7	1.000	
Metolachlor	----	2.276	2.311	2.389	2.622	----	2.509	2.400	----	----	2.418	5.3	1.000	
Metribuzin	----	0.535	0.541	0.562	0.616	----	0.615	0.618	----	----	0.581	6.8	1.000	
Pendimethalin	----	0.400	0.460	0.454	0.474	----	0.459	0.477	----	----	0.454	6.2	1.000	
Prometon	----	0.938	0.946	0.945	0.981	----	0.889	0.743	----	----	0.907	9.4	0.997	
Propachlor	----	0.660	0.683	0.686	0.737	----	0.688	0.667	----	----	0.687	3.9	1.000	
Simazine	----	0.280	0.283	0.279	0.307	----	0.287	0.269	----	----	0.284	4.5	1.000	
Terbufos	----	1.403	1.354	1.386	1.430	----	1.517	1.552	----	----	1.440	5.4	1.000	
Trifluralin	----	1.006	1.081	1.075	1.169	----	1.162	1.213	----	----	1.118	6.9	1.000	

Avg RF = Average response factor

Max %RSD = 30% for a linear fit

Q = A flag or qualifier indicating possible cause for an out of range or failed result.

Comments: \_\_\_\_\_

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**DETERMINATION OF METHOD DETECTION LIMITS**  
**METHOD 525.2 Extended - BROAD SPECTRUM PESTICIDES**

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Acq. File:	A032598A
Contact:	n/a	Task:	n/a	Data Directory:	AE\032598A
Project:	Routine MDL	Case :	n/a	Initial Cali Data:	0220F0AE
Column:	Restek XTI-5 30m x 0.25mm ID	Method:	525.2C	Instrument ID:	GC/MS - AE
Matrix Code:	RW				

Method	CAS#	Parameter	Analysis Date	Observed Recovery							Stat.	Calc.	MDL	Units
				Rep=1	Rep=2	Rep=3	Rep=4	Rep=5	Rep=6	Rep=7				
525.2	34256-82-1	Acetochlor	03/25/98	0.1	0.097	0.111	0.096	0.086	0.103	0.104	0.099	0.078	0.025	ug/L
525.2	15972-60-8	Alachlor		0.1	0.124	0.119	0.128	0.120	0.129	0.121	0.127	0.0041	0.013	ug/L
525.2	1912-24-9	Atrazine		0.1	0.101	0.098	0.110	0.097	0.101	0.105	0.103	0.0044	0.014	ug/L
525.2	314-40-9	Bromacil		0.1	0.216	0.223	0.208	0.211	0.205	0.222	0.216	0.0068	0.021	ug/L
525.2	21725-46-2	Cyanazine		0.1	0.108	0.121	0.096	0.109	0.108	0.110	0.109	0.0073	0.023	ug/L
525.2	333-41-5	Diazinon		0.1	0.289	0.278	0.283	0.286	0.282	0.265	0.252	0.0133	0.042	ug/L
525.2	959-98-8	Endosulfan I		0.1	0.142	0.142	0.123	0.140	0.129	0.130	0.130	0.0075	0.024	ug/L
525.2	33213-65-9	Endosulfan II		0.1	0.104	0.119	0.090	0.129	0.086	0.100	0.094	0.0157	0.049	ug/L
525.2	1031-07-8	Endosulfan Sulfate		0.1	0.096	0.097	0.095	0.110	0.099	0.092	0.128	0.0126	0.040	ug/L
525.2	22224-92-6	Fenamiphos		0.1	0.108	0.118	0.129	0.122	0.127	0.116	0.118	0.0071	0.022	ug/L
525.2	51218-45-2	Metolachlor		0.1	0.122	0.118	0.125	0.122	0.120	0.126	0.126	0.0031	0.010	ug/L
525.2	21087-64-9	Metrifuron		0.1	0.093	0.091	0.096	0.091	0.099	0.095	0.093	0.0029	0.009	ug/L
525.2	40487-42-1	Pendimethalin		0.1	0.095	0.099	0.096	0.102	0.103	0.096	0.094	0.0035	0.011	ug/L
525.2	1610-18-0	Prometon		0.1	0.084	0.069	0.068	0.070	0.057	0.046	0.066	0.0118	0.037	ug/L
525.2	1918-16-7	Propachlor		0.1	0.119	0.106	0.119	0.103	0.117	0.119	0.119	0.0070	0.022	ug/L
525.2	122-34-9	Simazine		0.1	0.122	0.113	0.103	0.096	0.102	0.109	0.111	0.0085	0.027	ug/L
525.2	13071-79-9	Terbufos		0.1	0.117	0.103	0.128	0.097	0.132	0.126	0.126	0.0135	0.042	ug/L
525.2	1582-09-8	Trifluralin		0.1	0.139	0.138	0.140	0.129	0.134	0.143	0.145	0.0054	0.017	ug/L

Q = A flag or qualifier indicating possible cause for an out of range or failed result.

Comments \_\_\_\_\_

**CHLORINATED ACID PESTICIDES - GC/MS TUNING  
AND MASS CALIBRATION - Decafluorotriphenylphosphine (DFTPP)**

Lab Name: Environmental Health Laboratories Lab ID: unknown Acq. File: A020599A  
Contract: BAA 97-044 Task: 4A Data Directory: N020599A  
Project: IDEM / Pesticide Monitoring Network Case: n/a Initial Cali File: 0105G0N  
Column: Restek XTI-5 30m x 0.25mm ID Method: 515.1 Instrument ID: GC/MS - N

m/e	Ion Abundance Criteria	% Rel Abundance	Q	Matrix	Code
51	10 to 80% of base peak	30.97		Reagent Water	RW
68	< 2% of Mass 69	0.00		Surface Water	SW
70	< 2% of Mass 69	0.00		Drinking Water	DW
127	10 to 80% of base peak	28.42		Ground Water	GW
197	< 2% of Mass 198	0.00		Waste Water	WW
198	base peak or > 50 % of mass 442	100.00		Sediment	SE
199	5 to 9% of mass 198	8.25		Soil	SO
275	10 to 60% of base peak	22.06		Sludge	SL
365	> 1% of base peak	4.16		Other Solvents	OS
441	Present and < mass 443	15.40		TCLP Leachate	TC
442	base peak or > 50 % of mass 198	66.40		Hazardous Waste	HW
443	15 to 24% of mass 442	17.82		Contamination Levels: L=Low M=Medium H=High	

	Sample No. / Sample Description	Data File / Sample ID	Date Analyzed	Time Analyzed	Matrix Code	Contm. Level
1	Tune 1	TI-DFN1	02/05/99	11:13	OS	
2	SPCC	S-515A	02/05/99	11:31	OS	
3	Continuing Calibration Check A	C-1-06A	02/05/99	11:54	OS	
4	Continuing Calibration Check B	C-1-06B	02/05/99	12:16	OS	
5	Laboratory Method Blank A	MB-515A	02/05/99	13:00	RW	
6	Laboratory Fortified Blank A	FB-515A	02/05/99	13:22	RW	
7	DK 12481	386324	02/05/99	18:23	GW	L
8	DK 12329	386331	02/05/99	18:45	GW	L
9	DK 12329 Matrix Spike	386332-S	02/05/99	19:07	GW	
10	DK 12329 Matrix Spike Duplicate	386333SD	02/05/99	19:29	GW	
11	QCS A	Q-515A	02/05/99	19:51	RW	
12	Continuing Calibration Check C	C-2-06C	02/05/99	20:13	OS	
13						
14						
15						
16						
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23						
24						

Q = A flag or qualifier indicating possible cause for an out of range reading.

Comments: \_\_\_\_\_  
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**CHLORINATED ACID PESTICIDES  
LABORATORY PERFORMANCE CHECK**

Lab Name: Environmental Health Laboratories	Lab ID: unknown	Acq. File: A020599A
Contract: BAA 97-044	Task: 4A	Data Directory: N\020599A
Project: IDEM / Pesticide Monitoring Network	Case: n/a	Initial Cali File: 0105G0N
Column: Restek XTI-5 30m x 0.25mm ID	Method: 515.1	Instrument ID: GC/MS - N
Data File: S-515A		

Compound	Test	Conc. ug/ml	Requirements	Result	Pass/Fail	Q
Dinoseb	Sensitivity	0.05	Detection of analyte: S/N > 3	9.9	Pass	
4 - Nitrophenol	Chromatographic Performance	5.00	0.70 < PGF < 1.05 (a)	0.85	Pass	
4 - Nitrophenol	Column Performance	0.15				
3,5-Dichlorobenzoic acid	Performance	0.30	Resolution > 0.40 (b)	0.57	Pass	

Q = A flag or qualifier indicating possible cause for an out of range or failed result.

(a) PGF - peak Gaussian factor. Calculated using the equation:

$$\text{PGF} = \frac{1.83 \times W(1/2)}{W(1/10)}$$

where  $W(1/2)$  is the peak width at half height and  $W(1/10)$  is the peak width at tenth height.

(b) Resolution between the two peaks as defined by the equation:

$$R = \frac{t}{w}$$

where  $t$  is the difference in elution times between the two peaks and  $W$  is the average peak width, at the baseline, of the two peaks.

Comments: \_\_\_\_\_  
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**Environmental Health Laboratories  
Continuing Calibration Check Check**

**File Name:** C-5-06A  
**Acquisition File:** A020599A  
**Data Directory:** 020599A  
**Today's Date:** 1999/08/13  
**Instrument:** GC/MS - N  
**Extracted Date:** Not Available  
**Sample Number:** 386632

**Method:** 515.1 - IDEM  
**Calibration File:** 0105G0N  
**Analysis Date:** 1999/02/05  
**Analysis Time:** 11:54  
**Analyst:** willard  
**Results Submitted By:** day  
**Run Number:** 19501

**Sample Description:** CCC A

**Sample Quality Control**

<u>CAS No.</u>	<u>Parameter</u>	Limits				
		<u>Amount</u>	<u>Units</u>	<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>
10386-84-2	IS-4,4'-Dibromoocetafluorobiphenyl	5.0	ug/L	100.0	70.0	130.0

**Ordered Parameter Results**

<u>CAS No.</u>	<u>Parameter</u>	Limits						
		<u>Target</u>	<u>Amount</u>	<u>Units</u>	<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>	<u>Pass/Fail</u>
94-75-7	2,4-D	5.0	5.071	ug/L	101.42	80.0	120.0	PASS
94-82-6	2,4-DB	5.0	4.68	ug/L	93.6	80.0	120.0	PASS
50594-66-6	Acifluorfen	5.0	5.032	ug/L	100.64	80.0	120.0	PASS
25057-89-0	Bentazon	5.0	5.593	ug/L	111.86	80.0	120.0	PASS
1918-00-9	Dicamba	5.0	5.85	ug/L	117.0	80.0	120.0	PASS
94-74-6	MCPA	5.0	5.2	ug/L	104.0	80.0	120.0	PASS
7085-19-0	Mecoprop	5.0	5.1	ug/L	102.0	80.0	120.0	PASS
1918-02-1	Picloram	5.0	4.872	ug/L	97.44	80.0	120.0	PASS

**Environmental Health Laboratories  
Continuing Calibration Check Check**

**File Name:** C-5-06B  
**Acquisition File:** A020599A  
**Data Directory:** 020599A  
**Today's Date:** 1999/08/13  
**Instrument:** GC/MS - N  
**Extracted Date:** Not Available  
**Sample Number:** 386633

**Method:** 515.1 - IDEM  
**Calibration File:** 0105G0N  
**Analysis Date:** 1999/02/05  
**Analysis Time:** 12:16  
**Analyst:** willard  
**Results Submitted By:** day  
**Run Number:** 19501

**Sample Description:** CCC A

**Sample Quality Control**

<u>CAS No.</u>	<u>Parameter</u>	Limits				
		<u>Amount</u>	<u>Units</u>	<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>
10386-84-2	IS-4,4'-Dibromo-octafluorobiphenyl	5.0	ug/L	108.26	70.0	130.0

**Ordered Parameter Results**

<u>CAS No.</u>	<u>Parameter</u>	Limits						
		<u>Target</u>	<u>Amount</u>	<u>Units</u>	<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>	<u>Pass/Fail</u>
94-75-7	2,4-D	5.0	5.272	ug/L	105.44	80.0	120.0	PASS
94-82-6	2,4-DB	5.0	4.748	ug/L	94.96	80.0	120.0	PASS
50594-66-6	Acifluorfen	5.0	4.816	ug/L	96.32	80.0	120.0	PASS
25057-89-0	Bentazon	5.0	5.408	ug/L	108.16	80.0	120.0	PASS
1918-00-9	Dicamba	5.0	5.848	ug/L	116.96	80.0	120.0	PASS
94-74-6	MCPA	5.0	5.122	ug/L	102.44	80.0	120.0	PASS
7085-19-0	Mecoprop	5.0	5.287	ug/L	105.74	80.0	120.0	PASS
1918-02-1	Picloram	5.0	5.036	ug/L	100.72	80.0	120.0	PASS

**Environmental Health Laboratories  
Laboratory Method Blank Check**

**File Name:** MB-515A  
**Acquisition File:** A020599A  
**Data Directory:** 020599A  
**Instrument:** GC/MS - N  
**Extracted Date:** 1999/02/04  
**Sample Number:** 386634  
**Sample Location:** Not Available  
**Sample Description:** LMB A L

**Method:** 515.1 - IDEM  
**Calibration File:** 0105G0N  
**Analysis Date:** 1999/02/05  
**Analysis Time:** 13:00  
**Analyst:** willard  
**Results Submitted By:** day  
**Run Number:** 19501

**Sample Quality Control**

<u>CAS No.</u>	<u>Parameter</u>	Limits				
		<u>Amount</u>	<u>Units</u>	<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>
19719-28-9	SS-2,4-Dichlorophenylacetic acid	10.051	ug/L	100.51	70.0	130.0
10386-84-2	IS-4,4'-Dibromooctafluorobiphenyl	5.0	ug/L	88.51	70.0	130.0

**Ordered Parameter Results**

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>MRL</u>	<u>Units</u>
94-75-7	2,4-D	<	0.1	ug/L
94-82-6	2,4-DB	<	0.1	ug/L
50594-66-6	Acifluorfen	<	0.5	ug/L
25057-89-0	Bentazon	<	0.1	ug/L
1918-00-9	Dicamba	<	0.1	ug/L
94-74-6	MCPA	<	0.1	ug/L
7085-19-0	Mecoprop	<	0.1	ug/L
1918-02-1	Picloram	<	0.1	ug/L

**Additional Found Parameters**

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>Units</u>

**Environmental Health Laboratories  
Laboratory Fortified Blank Check**

**File Name:** FB-515A  
**Acquisition File:** A020599A  
**Data Directory:** 020599A  
**Today's Date:** 1999/08/13  
**Instrument:** GC/MS - N  
**Extracted Date:** 1999/02/04  
**Sample Number:** 386635

**Method:** 515.1 - IDEM  
**Calibration File:** 0105G0N  
**Analysis Date:** 1999/02/05  
**Analysis Time:** 13:22  
**Analyst:** willard  
**Results Submitted By:** day  
**Run Number:** 19501

**Sample Description:** LFB A L

**Sample Quality Control**

<u>CAS No.</u>	<u>Parameter</u>	Limits				
		<u>Amount</u>	<u>Units</u>	<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>
19719-28-9	SS-2,4-Dichlorophenylacetic acid	8.717	ug/L	87.17	70.0	130.0
10386-84-2	IS-4,4'-Dibromo-octafluorobiphenyl	5.0	ug/L	90.40	70.0	130.0

**Ordered Parameter Results**

<u>CAS No.</u>	<u>Parameter</u>	Limits						
		<u>Target</u>	<u>Amount</u>	<u>Units</u>	<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>	<u>Pass/Fail</u>
94-75-7	2,4-D	10.0	8.721	ug/L	87.21	70.0	130.0	PASS
94-82-6	2,4-DB	10.0	9.486	ug/L	94.86	70.0	130.0	PASS
50594-66-6	Acifluorfen	10.0	8.157	ug/L	81.57	70.0	130.0	PASS
25057-89-0	Bentazon	10.0	10.454	ug/L	104.54	70.0	130.0	PASS
1918-00-9	Dicamba	10.0	9.372	ug/L	93.72	70.0	130.0	PASS
94-74-6	MCPA	10.0	9.696	ug/L	96.96	70.0	130.0	PASS
7085-19-0	Mecoprop	10.0	8.898	ug/L	88.98	70.0	130.0	PASS
1918-02-1	Picloram	10.0	9.275	ug/L	92.75	70.0	130.0	PASS

**Environmental Health Laboratories  
Sample Result Record Sheet**

**File Name:** 386324      **Method:** 515.1 - IDEM  
**Acquisition File:** A020599A      **Calibration File:** 0105G0N  
**Data Directory:** 020599A      **Analysis Date:** 1999/02/05  
**Instrument:** GC/MS - N      **Analysis Time:** 18:23  
**Extracted Date:** 1999/02/04      **Analyst:** willard  
**Sample Number:** 386324      **Results Submitted By:** day  
**Sample Location:** Not Available      **Run Number:** 19501  
**Sample Description:** IDEM DK12481 L

**Sample Quality Control**

<u>CAS No.</u>	<u>Parameter</u>	Limits				
		<u>Amount</u>	<u>Units</u>	<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>
19719-28-9	SS-2,4-Dichlorophenylacetic acid	7.532	ug/L	75.32	70.0	130.0
10386-84-2	IS-4,4'-Dibromo-octafluorobiphenyl	5.0	ug/L	102.18	70.0	130.0

**Ordered Parameter Results**

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>MRL</u>	<u>Units</u>
94-75-7	2,4-D	<	0.1	ug/L
94-82-6	2,4-DB	<	0.1	ug/L
50594-66-6	Acifluorfen	<	0.5	ug/L
25057-89-0	Bentazon	<	0.1	ug/L
1918-00-9	Dicamba	<	0.1	ug/L
94-74-6	MCPA	<	0.1	ug/L
7085-19-0	Mecoprop	<	0.1	ug/L
1918-02-1	Picloram	<	0.1	ug/L

**Additional Found Parameters**

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>Units</u>

**Environmental Health Laboratories**  
**Sample Result Record Sheet**

**File Name:** 386331                   **Method:** 515.1 - IDEM  
**Acquisition File:** A020599A       **Calibration File:** 0105G0N  
**Data Directory:** 020599A           **Analysis Date:** 1999/02/05  
**Instrument:** GC/MS - N           **Analysis Time:** 18:45  
**Extracted Date:** 1999/02/04       **Analyst:** willard  
**Sample Number:** 386331           **Results Submitted By:** day  
**Sample Location:** Not Available   **Run Number:** 19501  
**Sample Description:** IDEM DK12329 L

**Sample Quality Control**

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>Units</u>	Limits		
				<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>
19719-28-9	SS-2,4-Dichlorophenylacetic acid	7.268	ug/L	72.68	70.0	130.0
10386-84-2	IS-4,4'-Dibromooctafluorobiphenyl	5.0	ug/L	88.88	70.0	130.0

**Ordered Parameter Results**

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>MRL</u>	<u>Units</u>
94-75-7	2,4-D	<	0.1	ug/L
94-82-6	2,4-DB	<	0.1	ug/L
50594-66-6	Acifluorfen	<	0.5	ug/L
25057-89-0	Bentazon	<	0.1	ug/L
1918-00-9	Dicamba	<	0.1	ug/L
94-74-6	MCPA	<	0.1	ug/L
7085-19-0	Mecoprop	<	0.1	ug/L
1918-02-1	Picloram	<	0.1	ug/L

**Additional Found Parameters**

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>Units</u>

**CHLORINATED ACID PESTICIDES**  
**MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY**

Lab Name: Environmental Health Laboratories      Lab ID: unknown      Acq. File: A020599A  
 Contract: BAA 97-044      Task: 4A      Data Directory: 020599A  
 Project: IDEM / Pesticide Monitoring Network      Case: na      Initial Cali File: 0105G0N  
 Column: Restek XTI-5 30m x 0.25mm ID      Method: 515.1      Instrument ID: GC/MS - N  
 Sample Number/Description: 386331 / IDEM DK12329      Matrix: GW      MS Data File: 386332-S  
 MSD Data File: 386333SD

Compound	Spike Added	Sample Conc	MS Conc	MS % Rec	% Recovery Limits	MSD Conc	MSD % Rec	% Recovery Limits	MSD Q	MSD RPD	% Recovery Limits	MSD Q	MSD RPD	% Recovery Limits	MSD Q	MSD RPD
Acifluorfen	10.0	NF	7.585	75.9	70 - 130	8.678	86.8	70 - 130	13.4	20%						
Bentazon	10.0	NF	9.645	96.5	70 - 130	10.221	102.2	70 - 130	5.8	20%						
2,4-D	10.0	NF	9.294	92.9	70 - 130	10.570	105.7	70 - 130	12.8	20%						
2,4-DB	10.0	NF	10.214	102.1	70 - 130	11.329	113.3	70 - 130	10.4	20%						
Dicamba	10.0	NF	10.169	101.7	70 - 130	11.648	116.5	70 - 130	13.6	20%						
MCPA	10.0	NF	9.808	98.1	70 - 130	10.564	105.6	70 - 130	7.4	20%						
Mecoprop	10.0	NF	9.682	96.8	70 - 130	8.850	88.5	70 - 130	9.0	20%						
Picloram	10.0	NF	7.828	78.3	70 - 130	9.361	93.6	70 - 130	17.8	20%						

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

NF = Not Found

% Rec = (MS Conc - Sample Conc) x 100 / Spike Added

RPD (Relative % Difference) = abs(MS Conc - MSD Conc) x 100 / ((MS Conc + MSD Conc) / 2)

Comments:

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Environmental Health Laboratories

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**Environmental Health Laboratories  
Quality Control Sample Check**

**File Name:** Q-515A  
**Acquisition File:** A020599A  
**Data Directory:** 020599A  
**Today's Date:** 1999/08/13  
**Instrument:** GC/MS - N  
**Extracted Date:** 1999/02/04  
**Sample Number:** 386636

**Method:** 515.1 - IDEM  
**Calibration File:** 0105G0N  
**Analysis Date:** 1999/02/05  
**Analysis Time:** 19:51  
**Analyst:** willard  
**Results Submitted By:** day  
**Run Number:** 19501

**Sample Description:** QCS A L

**Sample Quality Control**

<u>CAS No.</u>	<u>Parameter</u>	Limits				
		<u>Amount</u>	<u>Units</u>	<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>
19719-28-9	SS-2,4-Dichlorophenylacetic acid	8.491	ug/L	84.91	70.0	130.0
10386-84-2	IS-4,4'-Dibromo-octafluorobiphenyl	5.0	ug/L	89.42	70.0	130.0

**Ordered Parameter Results**

<u>CAS No.</u>	<u>Parameter</u>	Limits						
		<u>Target</u>	<u>Amount</u>	<u>Units</u>	<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>	<u>Pass/Fail</u>
94-75-7	2,4-D	2.0	1.405	ug/L	70.25	70.0	130.0	PASS
94-82-6	2,4-DB	2.0	1.552	ug/L	77.6	70.0	130.0	PASS
50594-66-6	Acifluorfen	2.0	1.987	ug/L	99.35	70.0	130.0	PASS
25057-89-0	Bentazon	2.0	1.51	ug/L	75.5	70.0	130.0	PASS
1918-00-9	Dicamba	2.0	1.656	ug/L	82.8	70.0	130.0	PASS
94-74-6	MCPA	2.0	1.456	ug/L	72.8	70.0	130.0	PASS
7085-19-0	Mecoprop	2.0	1.461	ug/L	73.05	70.0	130.0	PASS
1918-02-1	Picloram	2.0	1.417	ug/L	70.85	70.0	130.0	PASS

**Environmental Health Laboratories  
Continuing Calibration Check Check**

**File Name:** C-2-06C  
**Acquisition File:** A020599A  
**Data Directory:** 020599A  
**Today's Date:** 1999/08/13  
**Instrument:** GC/MS - N  
**Extracted Date:** Not Available  
**Sample Number:** 386637

**Method:** 515.1 - IDEM  
**Calibration File:** 0105G0N  
**Analysis Date:** 1999/02/05  
**Analysis Time:** 20:13  
**Analyst:** willard  
**Results Submitted By:** day  
**Run Number:** 19501

**Sample Description:** CCC C

**Sample Quality Control**

<u>CAS No.</u>	<u>Parameter</u>	Limits				
		<u>Amount</u>	<u>Units</u>	<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>
10386-84-2	IS-4,4'-Dibromoocetafluorobiphenyl	5.0	ug/L	110.54	70.0	130.0

**Ordered Parameter Results**

<u>CAS No.</u>	<u>Parameter</u>	Limits						
		<u>Target</u>	<u>Amount</u>	<u>Units</u>	<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>	<u>Pass/Fail</u>
94-75-7	2,4-D	2.0	1.729	ug/L	86.45	80.0	120.0	PASS
94-82-6	2,4-DB	2.0	1.691	ug/L	84.55	80.0	120.0	PASS
50594-66-6	Acifluorfen	2.0	1.969	ug/L	98.45	80.0	120.0	PASS
25057-89-0	Bentazon	2.0	1.912	ug/L	95.6	80.0	120.0	PASS
1918-00-9	Dicamba	2.0	2.041	ug/L	102.05	80.0	120.0	PASS
94-74-6	MCPA	2.0	1.692	ug/L	84.6	80.0	120.0	PASS
7085-19-0	Mecoprop	2.0	1.528	ug/L	76.4	80.0	120.0	*FAIL*
1918-02-1	Picloram	2.0	1.854	ug/L	92.7	80.0	120.0	PASS

08/13/99

**Environmental Health Laboratories  
Volatile Organic Chemicals  
Internal Standard Percent Recovery**

	<b>IS1 Area</b>	<b>IS1 RT</b>
CCC Standard	119327	8.583
CCC Upper Limit	155125.1	N/A
CCC Lower Limit	83528.9	N/A
Init Cali Lower Limit	N/A	N/A

<b>Sample No.</b>	<b>Filename</b>	<b>IS1 Area</b>	<b>Q</b>	<b>IS1 RT</b>	<b>Q</b>	<b>IS1 %Rec</b>	<b>Q</b>	<b>Matrix</b>
1. 386633 / CCC	C-5-06B	129181		8.5656		108.26		OS

IS1 = IS-4,4'-Dibromo octafluorobiphenyl

Q = Out of Range

08/13/99

**Environmental Health Laboratories  
Volatile Organic Chemicals  
Internal Standard Percent Recovery**

	<b>IS1 Area</b>	<b>IS1 RT</b>
CCC Standard	129181	8.5656
CCC Upper Limit	167935.3	N/A
CCC Lower Limit	90426.7	N/A
Init Cali Lower Limit	N/A	N/A

<b>Sample No.</b>	<b>Filename</b>	<b>IS1 Area</b>	<b>Q</b>	<b>IS1 RT</b>	<b>Q</b>	<b>IS1 %Rec</b>	<b>Q</b>	<b>Matrix</b>
1. 386634 / LMB	MB-515A	114337	8.5656	88.51	RW			
2. 386635 / LFB	FB-515A	116778	8.583	90.40	RW			
3. 386324 / FS	386324	131994	8.5986	102.18	GW			
4. 386331 / FS	386331	114819	8.5995	88.88	GW			
5. 386332 / MS	386332-S	149420	8.5821	115.67	GW			
6. 386333 / MSD	386333SD	125765	8.6004	97.36	GW			
7. 386636 / QCS	Q-515A	115514	8.5986	89.42	RW			
8. 386637 / CCC	C-2-06C	142800	8.5977	110.54	OS			

IS1 = IS-4,4'-Dibromo-octafluorobiphenyl

Q = Out of Range

08/13/99

**Environmental Health Laboratories  
Volatile Organic Chemicals  
Surrogate Percent Recovery**

	Upper Limit	Lower Limit
<b>SS1</b>	130.0	70.0

<b>Sample No. / Desc</b>	<b>Filename</b>	<b>SS1</b>	<b>target</b>	<b>%Rec</b>	<b>Q</b>	<b>Tot Matrix</b>
1. 386634 / LMB	MB-515A	10.051	5.0	100.51	0	RW
2. 386635 / LFB	FB-515A	8.717	5.0	87.17	0	RW
3. 386324 / FS	386324	7.532	5.0	75.32	0	GW
4. 386331 / FS	386331	7.268	5.0	72.68	0	GW
5. 386332 / MS	386332-S	8.467	5.0	84.67	0	GW
6. 386333 / MSD	386333SD	8.778	5.0	87.78	0	GW
7. 386636 / QCS	Q-515A	8.491	5.0	84.91	0	RW

SS1 = SS-2,4-Dichlorophenylacetic acid

Q = Out of Range

**CHLORINATED ACID PESTICIDES**  
**INITIAL CALIBRATION**

Lab Name: Environmental Health Laboratories	Lab ID: unknown	Acq. File: A020599A
Contract: BAA 97-044	Task: 4A	Data Directory: N\020599A
Project: IDEM / Pesticide Monitoring Network	Case: n/a	Initial Cali File: 0105G0N
Column: Restek XTI-5 30m x 0.25mm ID	Method: 515.1	Instrument ID: GC/MS - N

Data File / Sample ID:		I-01-06A	I-05-06A	I-1-06A	I-2-06A	I-5-06A	I-10-06A	I-25-06A	Avg	%	Corr	Q
Compound	Concentration:	0.1 ug/L	0.5 ug/L	1 ug/L	2 ug/L	5 ug/L	10 ug/L	25 ug/L	Rf	RSD	Coeff	
		Rf	Rf	Rf	Rf	Rf	Rf	Rf				
Acifluorfen		----	----	3.084	3.362	2.885	2.917	3.234	3.096	6.6	0.996	
Bentazon		11.755	10.683	10.016	10.273	7.951	7.146	6.163	9.141	22.6	0.997	*
2,4-D		4.765	4.193	4.281	4.301	4.017	4.250	4.874	4.383	7.2	0.998	
2,4-DB		8.446	7.811	7.293	7.709	6.384	6.476	----	7.353	11.0	0.997	
Dicamba		7.950	6.633	6.407	6.469	5.029	5.003	6.332	6.260	16.2	0.997	
MCPA		2.591	2.544	2.500	2.742	2.401	2.702	----	2.580	4.9	0.993	
Mecoprop		2.129	1.983	1.968	2.053	2.392	2.918	----	2.240	16.4	0.985	
Picloram		8.346	5.696	5.768	5.639	4.576	----	----	6.005	23.3	0.985	*

Avg RF = Average response factor

Max %RSD = 20% for a linear fit

Q = A flag or qualifier indicating possible cause for an out of range or failed result.

Comments: \_\_\_\_\_  
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**DETERMINATION OF METHOD DETECTION LIMITS**  
**METHOD 515.1 - CHLORINATED ACID PESTICIDES**

Lab Name: Environmental Health Laboratories  
 Project: Routine MDL  
 Column: Restek XTI-5 30m x 0.25um ID  
 Extraction Technique: LSE  
 Matrix Code: RW

Extract. Vol: 500 mL  
 Disk: 47 mm  
 Cartridge: NA  
 Method: 515.1  
 LSE Matrix: RPS

Acq. File: A011399A  
 Data Directory: N011399A  
 Initial Cali Data: 0105G0N  
 Instrument ID: GC/MS - N

Method	CAS#	Parameter	Target	Observed Recovery (ug/L)						Std. Deviation	Calc. MDL	Units	
				Rep-1	Rep-2	Rep-3	Rep-4	Rep-5	Rep-6	Rep-7			
515.1	50594-66-6	Acifluorfen	0.2	0.274	0.235	0.231	0.273	0.263	0.253	0.242	0.018	0.055	ug/L
515.1	25057-89-0	Bentazone	0.2	0.233	0.227	0.228	0.234	0.233	0.227	0.228	0.003	0.010	ug/L
515.1	94-75-7	2,4-D	0.2	0.213	0.181	0.211	0.200	0.186	0.203	0.218	0.014	0.044	ug/L
515.1	94-82-6	2,4-DB	0.2	0.170	0.182	0.186	0.191	0.197	0.188	0.208	0.012	0.037	ug/L
515.1	1918-00-9	Dicamba	0.2	0.161	0.185	0.204	0.179	0.216	0.182	0.181	0.018	0.056	ug/L
515.1	94-74-6	MCPP	0.2	0.151	0.155	0.187	0.200	0.196	0.179	0.181	0.019	0.060	ug/L
515.1	7085-19-0	MCPP (Mecoprop)	0.2	0.179	0.185	0.208	0.184	0.201	0.175	0.196	0.012	0.038	ug/L
515.1	1918-02-1	Picloram	0.2	0.142	0.152	0.221	0.158	0.176	0.177	0.141	0.028	0.088	ug/L

Q = A flag or qualifier indicating possible cause for an out of range or failed result.

LSE = Liquid / solid extraction; LLE = Liquid / Liquid extraction

Comments:

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LSE Matrix = C8, C18, SDVB, Biorex-5, AG-1X-8, RPS

**CARBAMATE PESTICIDES**  
**METHOD BLANK SUMMARY**

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Acq. File:	A021299
Contract:	BAA 97-044	Task:	4A	Data Directory:	Q\A021299
Project:	IDEML / Pesticide Monitoring Network	Case:	n/a	Initial Cali File:	Q\A020899
Column:	Supelcosil LC-18-DB 15cm x 4.6mm	Method:	531.1	Instrument ID:	HPLC - Q
Blank File:	Q0212005	Ext Date:	02/12/99	Ext Method:	Filtration

This method blank applies to the following samples, ms, msd, blanks, standards.

	Sample No. / Sample Description	Data File / Sample ID	Date Analyzed	Time Analyzed	Matrix Code	Contm. Level
1	Laboratory Performance Check	Q0212002	02/12/99	12:16	RW	
2	Laboratory Fortified Blank	Q0212004	02/12/99	13:29	RW	
3	Laboratory Method Blank	Q0212005	02/12/99	14:06	RW	
4	Continuing Calibration Check	Q0212017	02/12/99	20:49	RW	
5	DK 12481 / EHL 386325	Q0212024	02/13/99	01:41	GW	L
6	DK 12329 / EHL 386334	Q0212025	02/13/99	02:18	GW	L
7	DK 12329 Matrix Spike / EHL 386335	Q0212026	02/13/99	02:55	GW	
8	DK 12329 Matrix Spike Duplicate / EHL 386336	Q0212027	02/13/99	03:31	GW	
9	Quality Control Sample	Q0212028	02/13/99	04:08	RW	
10	Continuing Calibration Check	Q0212029	02/13/99	04:45	RW	
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						

Comments:

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**CARBAMATE PESTICIDES  
LABORATORY PERFORMANCE CHECK**

Lab Name: Environmental Health Laboratories	Lab ID: unknown	Acq. File: A021299
Contract: BAA 97-044	Task: 4A	Data Directory: QVA021299
Project: IDEM / Pesticide Monitoring Network	Case: n/a	Initial Cali File: QVA020899
Column: Supelcosil LC-18-DB 15cm x 4.6mm ID	Method: 531.1	Instrument ID: HPLC - Q
Data File: Q0212002		

Compound	Test	Conc. ug/ml	Requirements	Result	Pass/Fail	Q
3-Hydroxycarbofuran	Sensitivity	2.0	Detection of analyte: S/N > 3	> 3	Pass	
Aldicarb Sulfoxide	Chromatographic Performance	100	0.90 < PGF < 1.10 (a)	0.951	Pass	
Methiocarb		20				
4-Bromo-3,5-dimethyl phenyl N-methylcarbamate	Column Performance	10	Resolution > 1.0 (b)	1.10	Pass	

Q = A flag or qualifier indicating possible cause for an out of range or failed result.

(a) PGF - peak Gaussian factor. Calculated using the equation:

$$\text{PGF} = \frac{1.83 \times W(1/2)}{W(1/10)}$$

where  $W(1/2)$  is the peak width at half height and  $W(1/10)$  is the peak width at tenth height.

(b) Resolution between the two peaks as defined by the equation:

$$R = \frac{t}{w}$$

where  $t$  is the difference in elution times between the two peaks and  $W$  is the average peak width, at the baseline, of the two peaks.

Comments: \_\_\_\_\_  
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**Environmental Health Laboratories  
Laboratory Fortified Blank Check**

**File Name:** q0212004  
**Acquisition File:** a021299  
**Data Directory:** \q\021299  
**Today's Date:** 1999/08/27  
**Instrument:** HPLC - Q  
**Extracted Date:** 1999/02/12  
**Sample Number:** 387969

**Method:** 531.1  
**Calibration File:** 020899Q  
**Analysis Date:** 1999/02/12  
**Analysis Time:** 13:29  
**Analyst:** mccarty  
**Results Submitted By:** mccarty  
**Run Number:** 17197

**Sample Description:** LAB FORTIFIED BLANK AT 10 ug/L. FILTERED

2/12/99 CM 9:30-10:10.

**Sample Quality Control**

<u>CAS No.</u>	<u>Parameter</u>	Limits				
		<u>Amount</u>	<u>Units</u>	<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>
N/A	4-Bromo-3,5-Dimethylphenyl-n-methylcarbamate	20.0	ug/L	99.98	70.0	130.0

**Ordered Parameter Results**

<u>CAS No.</u>	<u>Parameter</u>	Limits						
		<u>Target</u>	<u>Amount</u>	<u>Units</u>	<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>	<u>Pass/Fail</u>
116-06-3	Aldicarb	10.0	8.3995	ug/L	84.00	70.0	130.0	PASS
1563-66-2	Carbofuran	10.0	10.0172	ug/L	100.17	70.0	130.0	PASS
2032-65-7	Methiocarb	10.0	10.0898	ug/L	100.90	70.0	130.0	PASS
16752-77-5	Methomyl	10.0	10.1295	ug/L	101.30	70.0	130.0	PASS
23135-22-0	Oxamyl	10.0	10.1307	ug/L	101.31	70.0	130.0	PASS

**Environmental Health Laboratories  
Laboratory Method Blank Check**

**File Name:** q0212005                   **Method:** 531.1  
**Acquisition File:** a021299           **Calibration File:** 020899Q  
**Data Directory:** \q\021299           **Analysis Date:** 1999/02/12  
**Instrument:** HPLC - Q               **Analysis Time:** 14:06  
**Extracted Date:** 1999/02/12           **Analyst:** mccarty  
**Sample Number:** 387965               **Results Submitted By:** mccarty  
**Sample Location:** Not Available      **Run Number:** 17197  
**Sample Description:** LAB METHOD BLANK. FILTERED 2/12/99 CM  
  9:30-10:10.

**Sample Quality Control**

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>Units</u>	Limits		
				<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>
N/A	4-Bromo-3,5-Dimethylphenyl-n-methylcarbamate	20.0	ug/L	98.89	70.0	130.0

**Ordered Parameter Results**

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>MRL</u>	<u>Units</u>
116-06-3	Aldicarb	<	0.5	ug/L
1563-66-2	Carbofuran	<	0.9	ug/L
2032-65-7	Methiocarb	<	1.0	ug/L
16752-77-5	Methomyl	<	0.5	ug/L
23135-22-0	Oxamyl	<	1.0	ug/L

**Additional Found Parameters**

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>Units</u>
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**Environmental Health Laboratories  
Continuing Calibration Check Check**

**File Name:** q0212017  
**Acquisition File:** a021299  
**Data Directory:** \ql\021299  
**Today's Date:** 1999/08/27  
**Instrument:** HPLC - Q  
**Extracted Date:** 1999/02/12  
**Sample Number:** 387967

**Method:** 531.1  
**Calibration File:** 020899Q  
**Analysis Date:** 1999/02/12  
**Analysis Time:** 21:25  
**Analyst:** mccarty  
**Results Submitted By:** mccarty  
**Run Number:** 17197

**Sample Description:** CALIBRATION CHECK AT 5 ug/L.

**Sample Quality Control**

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>Units</u>	<u>%Rec</u>	<u>Limits</u>	
					<u>Lower</u>	<u>Upper</u>
N/A	4-Bromo-3,5-Dimethylphenyl-n-methylcarbamate	20.0	ug/L	101.27	70.0	130.0

**Ordered Parameter Results**

<u>CAS No.</u>	<u>Parameter</u>	<u>Target</u>	<u>Amount</u>	<u>Units</u>	<u>%Rec</u>	<u>Limits</u>		<u>Pass/Fail</u>
						<u>Lower</u>	<u>Upper</u>	
116-06-3	Aldicarb	5.0	4.7164	ug/L	94.33	80.0	120.0	PASS
1563-66-2	Carbofuran	5.0	5.0768	ug/L	101.54	80.0	120.0	PASS
2032-65-7	Methiocarb	5.0	5.2358	ug/L	104.72	80.0	120.0	PASS
16752-77-5	Methomyl	5.0	5.2316	ug/L	104.63	80.0	120.0	PASS
23135-22-0	Oxamyl	5.0	5.3198	ug/L	106.40	80.0	120.0	PASS

**Environmental Health Laboratories  
Sample Result Record Sheet**

**File Name:** q0212024      **Method:** 531.1  
**Acquisition File:** a021299      **Calibration File:** 020899Q  
**Data Directory:** \q\021299      **Analysis Date:** 1999/02/13  
**Instrument:** HPLC - Q      **Analysis Time:** 01:41  
**Extracted Date:** 1999/02/12      **Analyst:** mccarty  
**Sample Number:** 386325      **Results Submitted By:** mccarty  
**Sample Location:** Not Available      **Run Number:** 17197  
**Sample Description:** DK12481. FILTERED 2/12/99 CM 9:30-10:10.

**Sample Quality Control**

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>Units</u>	Limits		
				<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>
N/A	4-Bromo-3,5-Dimethylphenyl-n-methylcarbamate	20.0	ug/L	101.65	70.0	130.0

**Ordered Parameter Results**

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>MRL</u>	<u>Units</u>
116-06-3	Aldicarb	<	0.5	ug/L
1563-66-2	Carbofuran	<	0.9	ug/L
2032-65-7	Methiocarb	<	1.0	ug/L
16752-77-5	Methomyl	<	0.5	ug/L
23135-22-0	Oxamyl	<	1.0	ug/L

**Additional Found Parameters**

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>Units</u>

**Environmental Health Laboratories**  
**Sample Result Record Sheet**

**File Name:** q0212025                   **Method:** 531.1  
**Acquisition File:** a021299           **Calibration File:** 020899Q  
**Data Directory:** \ql\021299           **Analysis Date:** 1999/02/13  
**Instrument:** HPLC - Q               **Analysis Time:** 02:18  
**Extracted Date:** 1999/02/12           **Analyst:** mccarty  
**Sample Number:** 386334               **Results Submitted By:** mccarty  
**Sample Location:** Not Available      **Run Number:** 17197  
**Sample Description:** DK12329. FILTERED 2/12/99 CM 9:30-10:10.

**Sample Quality Control**

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>Units</u>	Limits		
				<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>
N/A	4-Bromo-3,5-Dimethylphenyl-n-methylcarbamate	20.0	ug/L	103.98	70.0	130.0

**Ordered Parameter Results**

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>MRL</u>	<u>Units</u>
116-06-3	Aldicarb	<	0.5	ug/L
1563-66-2	Carbofuran	<	0.9	ug/L
2032-65-7	Methiocarb	<	1.0	ug/L
16752-77-5	Methomyl	<	0.5	ug/L
23135-22-0	Oxamyl	<	1.0	ug/L

**Additional Found Parameters**

<u>CAS No.</u>	<u>Parameter</u>	<u>Amount</u>	<u>Units</u>

# CARBAMATE PESTICIDES MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

**Lab Name:** Environmental Health Laboratories  
**Contract:** BAA 97-044  
**Project:** IDEM / Pesticide Monitoring Network  
**Column:** Supelcosil LC-18-DB 15cm x 4.6mm ID  
**Sample Number/Description:** 386334 / DK12329

Lab ID:	na	Acq. File:	A021299
Task:	4A	Data Directory:	\QVA021299
Case:	na	Initial Call File:	020899Q
Method:	531.1	Instrument ID:	HPLC - Q
Matrix:	GW	MS Data File:	Q0212026
		MSD Data File:	Q0212027

**Q** = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

NF = Not Found

% Rec = % Recovery = (MS Conc - Sample Conc) x 100 / Spike Added  
 RPD = Relative Percent Difference = abs(MS Conc - MSSD Conc) x 100 /

RPD = Relative Percent Difference =  $\text{abs}(\text{MS Conc} - \text{MSD Conc}) \times 100 / (\text{MS Conc} + \text{MSD Conc}) / 2$

## Comments

Environmental Health Laboratories

**Environmental Health Laboratories  
Quality Control Sample Check**

**File Name:** q0212028  
**Acquisition File:** a021299  
**Data Directory:** \q\021299  
**Today's Date:** 1999/08/27  
**Instrument:** HPLC - Q  
**Extracted Date:** 1999/02/12  
**Sample Number:** 387970

**Method:** 531.1  
**Calibration File:** 020899Q  
**Analysis Date:** 1999/02/13  
**Analysis Time:** 04:08  
**Analyst:** mccarty  
**Results Submitted By:** mccarty  
**Run Number:** 17197

**Sample Description:** QUALITY CONTROL SAMPLE AT 10 ug/L. FILTERED

2/12/99 CM 9:30-10:10.

**Sample Quality Control**

<u>CAS No.</u>	<u>Parameter</u>	Limits				
		<u>Amount</u>	<u>Units</u>	<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>
N/A	4-Bromo-3,5-Dimethylphenyl-n-methylcarbamate	20.0	ug/L	95.87	70.0	130.0

**Ordered Parameter Results**

<u>CAS No.</u>	<u>Parameter</u>	Limits						
		<u>Target</u>	<u>Amount</u>	<u>Units</u>	<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>	<u>Pass/Fail</u>
116-06-3	Aldicarb	10.0	7.9987	ug/L	79.99	70.0	130.0	PASS
1563-66-2	Carbofuran	10.0	9.6508	ug/L	96.51	70.0	130.0	PASS
2032-65-7	Methiocarb	10.0	9.4196	ug/L	94.20	70.0	130.0	PASS
16752-77-5	Methomyl	10.0	9.4702	ug/L	94.70	70.0	130.0	PASS
23135-22-0	Oxamyl	10.0	9.6985	ug/L	96.98	70.0	130.0	PASS

**Environmental Health Laboratories  
Continuing Calibration Check Check**

**File Name:** q0212029  
**Acquisition File:** a021299  
**Data Directory:** \q\021299  
**Today's Date:** 1999/08/27  
**Instrument:** HPLC - Q  
**Extracted Date:** 1999/02/12  
**Sample Number:** 387968

**Method:** 531.1  
**Calibration File:** 020899Q  
**Analysis Date:** 1999/02/13  
**Analysis Time:** 04:45  
**Analyst:** mccarty  
**Results Submitted By:** mccarty  
**Run Number:** 17197

**Sample Description:** CALIBRATION CHECK AT 25 ug/L.

**Sample Quality Control**

<u>CAS No.</u>	<u>Parameter</u>	Limits				
		<u>Amount</u>	<u>Units</u>	<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>
N/A	4-Bromo-3,5-Dimethylphenyl-n-methylcarbamate	20.0	ug/L	98.71	70.0	130.0

**Ordered Parameter Results**

<u>CAS No.</u>	<u>Parameter</u>	Limits						
		<u>Target</u>	<u>Amount</u>	<u>Units</u>	<u>%Rec</u>	<u>Lower</u>	<u>Upper</u>	<u>Pass/Fail</u>
116-06-3	Aldicarb	25.0	22.5304	ug/L	90.12	80.0	120.0	PASS
1563-66-2	Carbofuran	25.0	25.725	ug/L	102.9	80.0	120.0	PASS
2032-65-7	Methiocarb	25.0	25.2073	ug/L	100.83	80.0	120.0	PASS
16752-77-5	Methomyl	25.0	25.7884	ug/L	103.15	80.0	120.0	PASS
23135-22-0	Oxamyl	25.0	26.1629	ug/L	104.65	80.0	120.0	PASS

08/26/99

**Environmental Health Laboratories  
Semi-Volatile Organic Chemicals  
Internal Standard Area Summary**

	<b>IS1 Area</b>	<b>IS1 RT</b>
CCC Standard	192677	26.559
CCC Upper Limit	250480.1	N/A
CCC Lower Limit	134873.9	N/A
Init Call Lower Limit	N/A	N/A

<b>Sample No.</b>	<b>Filename</b>	<b>IS1 Area</b>	<b>Q</b>	<b>IS1 RT</b>	<b>Q</b>	<b>IS1 %Rec</b>	<b>Q</b>	<b>Matrix</b>
1. 387969 / LFB	q0212004	190227	26.611	99.98	RW			
2. 387965 / LMB	q0212005	188159	26.696	98.89	RW			
3. 386325 / FS	q0212024	195863	26.491	101.65	GW			
4. 386334 / FS	q0212025	200348	26.49	103.98	GW			
5. 386335 / MS	q0212026	197082	26.452	102.29	GW			
6. 386336 / MSD	q0212027	198044	26.563	102.79	GW			
7. 387970 / QCS	q0212028	184726	26.534	95.87	RW			
8. 387968 / CCC	q0212029	190184	26.563	98.71	RW			

IS1 = 4-Bromo-3,5-Dimethylphenyl-n-methylcarbamate  
Q = Out of Range

## **CARBAMATE PESTICIDES INITIAL CALIBRATION**

Lab Name: Environmental Health Laboratories Lab ID: unknown Acq. File: A021299  
Contract: BAA 97-044 Task: 4A Data Directory: Q\A021299  
Project: IDEM / Pesticide Monitoring Network Case: n/a Initial Cali File: Q\A020899  
Column: Supelcosil LC-18-DB 15cm x 4.6mm Method: 531.1 Instrument ID: HPLC - Q

Avg RF = Average result factor

Max %RSD = 20%

**Q** = A flag or qualifier indicating possible cause for an out of range or failed result.

#### Comments:

**DETERMINATION OF METHOD DETECTION LIMITS  
METHOD 531.1 - CARBAMATE PESTICIDES**

Tech: CM

Date: 01/13/99

**Lab Name:** Environmental Health Laboratories

Contract:  
n

200

## Project: Routine MDLs

2015 RELEASE UNDER E.O. 14176

**Supplier:** Sulpeco Lt-18 UB, 4.6 x 150 mm

Matrix Code: BW

Matrix Code: RW

~102088008 ~102020203 ~106000003 ~111

Data File q1028008 q102003 q106003 q11

Analysis Date 10/28/98 11/02/98 11/06/98 11/11/98

**Q = A flag or qualifier indicating possible cause for an out of range or failed result.**

**COMMENTS** Acq. File: QVA110698, QVA11198, QVA111898, QVA112498, QVA120298, QVA102898, C:\QVA110298  
**Data Directory:** Q\A110698, Q\A11198, Q\A111898, Q\A112498, Q\A120298, Q\A102898, Q\A110298.  
**Initial Calibration Data:** Q\A102898, Q\A111898.